

# Sequence Protocol

<110> metaGen Gesellschaft für Genomforschung mbH 422 Rec'd PCT/PTO 2 2 SEP 2000

Human Nucleic Acid Sequences from Ovarian Tumor Tissue

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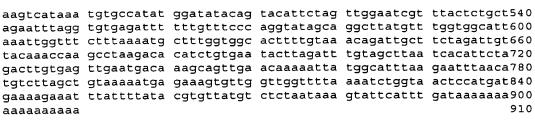
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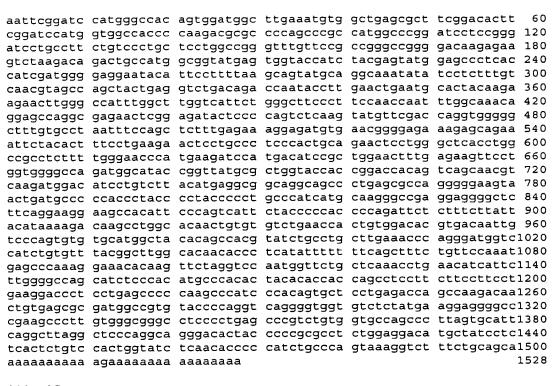
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<210> 44
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<211> 601

<212> DNA

<213> Homo sapiens

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<211> 2147

<212> DNA

<213> Homo sapiens

<sup>&</sup>lt;210> 45

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<210> 46
<211> 623
<212> DNA
<213> Homo sapiens
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<210> 47 <211> 781
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<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

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<210> 48 <211> 1714 <212> DNA <213> Homo sapiens

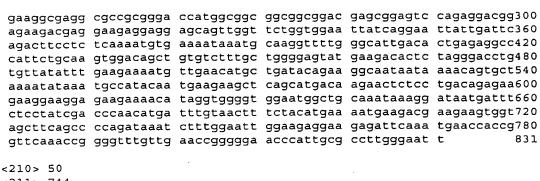
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<210> 49 <211> 831 <212> DNA <213> Homo sapiens

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<210> 50 <211> 744 <212> DNA

<213> Homo sapiens

<400> 50

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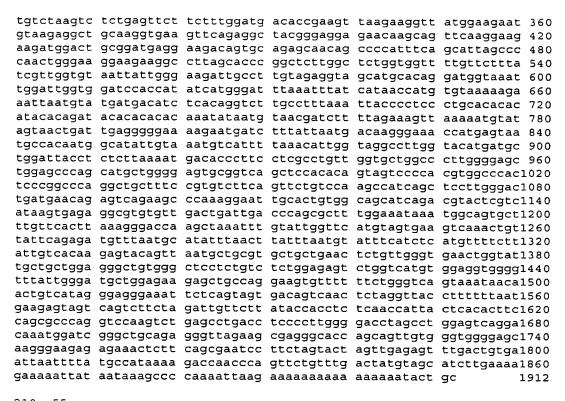
<210> 51 <211> 2017 <212> DNA <213> Homo sapiens

<400> 51

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<210> 55 <211> 1962

<212> DNA

<213> Homo sapiens

<400> 55

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<210> 56 <211> 1458 <212> DNA <213> Homo sapiens

<400> 56

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<210> 57 <211> 2188 <212> DNA <213> Homo sapiens

<400> 57

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<212> DNA

<213> Homo sapiens

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<212> DNA <213> Homo sapiens

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<211> 701

<212> DNA

<213> Homo sapiens

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<210> 69

<211> 817

<212> DNA

#### <213> Homo sapiens

<400> 69

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<213> Homo sapiens

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<213> Homo sapiens

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Pro Val Cys Gln Pro Lys Val Ala Phe Gly Met Leu Asn Phe Pro 25 20 His Leu Pro Asn Glu Val Thr Ile Arg Leu Asn Pro Val Lys Lys 35 40 Ser Thr Phe Pro Ile Asp Val Phe Tyr Lys Asn Phe Ser Lys Lys Leu 55 50 Asp Ser Thr Pro Lys Cys Ser Thr Leu Lys Ile Ser Leu Val Ile Lys 80 65 Asn Lys Asn Ile Trp Phe Leu Ala Pro 85 <210> 129 <211> 82 <212> PRT <213> Homo sapiens <400> 129 Thr Ile Leu Gly Pro Phe Tyr Gly Cys Thr Ile Leu Met Val Ala Asp 15 10 1 Glu Gln Asp Thr Tyr Phe Thr His Thr Lys Trp Pro Arg Asn His 30 25 Ser Thr His Pro Gly Glu Thr Tyr Ser Thr Ala Lys Lys Tyr Tyr Leu 40 45 35 Ser Thr Met Thr Tyr. Lys Thr Thr Leu Asp Gly Glu Lys Thr His 55 60 Leu Asn Asn Phe His Gln Leu Arg Cys Pro Thr Ile Ser Ser Cys Leu 75 65 70 Leu Val <210> 130 <211> 70 <212> PRT <213> Homo sapiens <400> 130 Gln Met Lys Ser Gly Ile Glu Asp Pro Trp Thr Asn Leu Val Thr Arg 15 Tyr Cys Leu Gln Val Asn Ala Asp Tyr Ser Leu Ala Phe Pro Leu Trp 30 25 20 Tyr Asn Phe Lys Ile Phe Gln Ala Thr Glu Leu Leu Glu Gly Tyr Lys 45 40 Thr Phe Ala Ala Glu Glu Trp Asn Gln Ser Ser Phe Tyr Leu Asn 55 Asn Val Val Trp Lys Ser 70 65

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<210> 133

Pro

Leu

Lys

<211> 423

Thr

Pro 180 <212> PRT

<213> Homo sapiens

<400> 133

Ile Arg Thr Leu Lys Gln Lys Lys Ile Asp Glu Glu Leu Ser Glu Asp 15 10 Ser Asn Ala Gln Gln Lys Lys Glu Thr Asn Asn Thr Ser Glu Glu His 30 25 2.0 Gly Gly Glu Gln Asp Glu Ile Glu Asp Pro Ser Glu Glu Gln Asn 40 35 Ser Leu Thr Leu Glu Glu Lys Glu Asn Lys Glu Tyr Leu Lys Leu Pro 50 55 Gly Gly Gln Asn Ile Pro Leu Asp Leu Met Lys Phe Ile Leu Ile 80 75 70 65 Glu Gly Leu Phe Thr Pro Asp Asn Phe Glu Ile Pro His Glu Ala Asp 90 95 Glu Val Gly Glu Leu Arg Ile Asn Ser Leu Glu Cys Arg Gln Ala Leu 110 105 100 Cys Ser Lys Thr Val Asn Thr Leu Phe Glu Thr Thr Ala Lys Arg Phe 120 115 Glu Glu Gln Gln Arg Gln Met Leu Glu Ile Cys Glu Ser Cys Ile Arg 135 140 130 Asp His Phe Phe Ser Ile Ile Thr Glu Val Arg Asp Ser Thr Leu Arq 160 145 150 Glu Glu His Leu Pro Val Leu Val Arg Ala Gly Ile Asp Val Val Asp 165 170 175 Phe Gly Glu Arg Glu Glu Phe Ile Leu Ser His Asn Leu Phe Val Asp 190 185 Phe His Thr Met Val Lys Glu Ile Leu Ala Pro Tyr Glu Ala Asp Ala 205 200 195 Cys Gly Ile Thr Glu Lys Trp Gly Leu Asn Met Glu Tyr Arg 215 210 Val Ser Gly Phe Ser Ser Lys Met Lys Val Val Ala Ser Tyr Ser Ile 240 225 230 235 Ile Cys Ser Ser Gln Ala Tyr Thr Leu Glu Lys Tyr Pro Leu Arq Leu 250 255 245 Met Gly Val Ser Val Pro Val Ala Lys Ala Leu Asn Met Trp Leu 270 265 260 Gly Phe His Arg Glu Glu Val Cys Ser Phe Val Ala Leu Thr Ile Ser 280 285 275 Ile Ala Val Leu Phe Ser Pro Gln Leu Leu Leu Glu Leu Asp Asn Val 300 290 295 Glu Arg Gly Lys Glu Leu Lys Glu Ile Cys Gln Asn Ser Lys

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305					310					315					320
Gln	Trp	Thr	Gly	Arg 325	His	Asp	Ala	Phe	Glu 330	Ile	Leu	Val	Glu	Leu 335	Leu
Gln	Ala	Leu	Val 340	Leu	Cys	Leu	Asp	Gly 345	Ile	Asn	Ser	Asp	Thr 350	Asn	Ile
Arg	Trp	Asn 355	Asn	Tyr	Ile	Ala	Gly 360	Arg	Ala	Phe	Val	Leu 365	Cys	Ser	Ala
Val	Ser 370	Asp	Phe	Asp	Phe	Ile 375	Val	Thr	Ile	Val	Val 380	Leu	Lys	Asn	Val
Leu 385	Ser	Phe	Thr	Arg	Ala 390	Phe	Gly	Lys	Asn	Leu 395	Gln	Gly	Gln	Thr	Ser 400
Asp	Val	Phe	Phe	Ala 405	Ala	Gly	Ser	Leu	Thr 410	Ala	Val	Leu	His	Ser 415	Leu
Asn	Glu	Val	Ser 420	Gly	Lys	Tyr									
<210><211><211><212><213>	237 PRT	sapie	ns				•								
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Val 1	Glu	Asn	Ile	Glu 5	Val	Tyr	His	Glu	Phe 10	Trp	Phe	Glu	Glu	Ala 15	Thr
Asn	Leu	Ala	Thr 20	Lys	Leu	Asp	Ile	Gln 25	Met	Lys	Leu	Pro	Gly 30	Lys	Phe
Arg	Arg	Ala 35	His	Gln	Gly	Asn	Leu 40	Glu	Ser	Gln	Leu	Thr 45	Ser	Glu	Ser
Tyr	Tyr 50	Lys	Glu	Thr	Leu	Ser 55	Val	Pro	Thr	Val	Glu 60	His	Ile	Ile	Gln
Glu 65	Leu	Lys	Asp	Ile	Phe 70	Ser	Glu	Gln	His	Leu 75	Lys	Ala	Leu	Lys	Cys 80
Leu	Ser	Leu	Val	Pro 85	Ser	Val	Met	Gly	Gln 90	Leu	Lys	Phe	Asn	Thr 95	Ser
Glu	Glu	His	His 100	Ala	Asp	Met	Tyr	Arg 105	Ser	Asp	Leu	Pro	Asn 110	Pro	Asp
Thr	Leu	Ser 115	Ala	Glu	Leu	His	Cys 120	Trp	Arg	Ile	Lys	Trp 125	Lys	His	Arg
Gly	Lys 130	Asp	Ile	Glu	Leu	Pro 135	Ser	Thr	Ile	Tyr	Glu 140	Ala	Leu	His	Leu
Pro 145	Asp	Ile	Lys	Phe	Phe 150	Pro	Asn	Val	Tyr	Ala 155	Leu	Leu	Lys	Val	Leu 160
Cys	Ile	Leu	Pro	Val 165	Met	Lys	Val	Glu	Asn 170	Glu	Arg	Tyr	Glu	Asn 175	Gly

Arg Lys Arg Leu Lys Ala Tyr Leu Arg Asn Thr Leu Thr Asp Gln Arg 185 190 Ser Ser Asn Leu Ala Leu Leu Ile Asn Asn Phe Asp Ile Lys His Asp 195 200 205 .Leu Asp Leu Met Val Asp Thr Tyr Ile Lys Leu Tyr Thr Ser Lys Ser 210 215 220 Glu Leu Pro Thr Asp Asn Ser Glu Thr Val Glu Asn Thr 230 <210> 135 <211> 89 <212> PRT <213> Homo sapiens <400> 135 Arg Ile Arg Ile Asn Gly Ser Leu Cys Pro Gln Thr Lys Asn Asn Leu 10 Tyr Phe His Ile Val Glu Leu Ser Ile Ser Gly Ala Ser Val Gly 20 Trp Arg Tyr Gly Met Gly Glu Ser Leu Pro Ala Arg Gly Ile Glu 35 40 Gln Gly Leu Leu Cys Leu Tyr Phe Tyr Lys Glu Ile Leu Pro Leu Phe 55 60 Leu Val Asn Lys Leu Arg Gly Thr Asp Val Gly Leu Glu Gln Gly Leu 65 75 Ser Gly Gly Glu Gly Ser Trp Thr Ala 85 <210> 136 <211> 82 <212> PRT <213> Homo sapiens <400> 136 Glu Glu Glu Arg Ala Lys Arg Glu Glu Leu Glu Arg Ile Leu Glu Glu 10 Asn Asn Arg Lys Ile Ala Glu Ala Gln Ala Lys Leu Ala Glu Glu Gln 20 25 Leu Arg Ile Val Glu Glu Gln Arg Lys Ile His Glu Glu Arg 40 45 Leu Glu Gln Glu Arg Gln Arg Gln Gln Lys Glu Gln Lys Ile Glu Ile 50 55 60 Leu Gly Lys Gly Lys Ser Arg Pro Lys Leu Ser Phe Ser Leu Lys Thr 65 75 Gln Asp

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<212> PRT

<213> Homo sapiens

<400> 137

Ser Ala Leu Lys Val Glu Tyr Leu Leu Ser Cys Pro Val Ser Cys Arg

Val Cys Ser Ser Ala Ala Ile Arg Ala Ser Phe Leu Phe Lys Met Ile

Cys Thr Val Ser Leu Ala Ile Pro Ala Ser Ala Ala Gln Pro Phe Ile 40

Lys Lys Gln His Thr Arg Lys Ala Glu Leu Arg Asn Ala Asp Val Tyr 50 60

Gly Lys Lys Glu Gln Lys Met

<210> 138

<211> 67

<212> PRT

<213> Homo sapiens

<400> 138

Ser Ser Ala Gln Arg Lys Tyr Phe Asn Leu Pro Val Glu Ile Leu Val 1 5 10

Met Glu Arg Cys Gln Thr Val Leu Asn Gly Arg Thr Ser Lys Ser Glu 20 25 30

Ala Thr Val Pro Thr Thr Arg Gly Leu Leu Tyr Cys Ser Thr Phe Ser 35 40 45

Ala Leu Tyr Phe Leu Ala Glu Ala Ser Pro Trp Ser Ala Met Tyr Lys 50 60

Leu Gly Tyr 65

<210> 139

<211> 49

<212> PRT

<213> Homo sapiens

<400> 139

Arg Ala Glu Lys Val Glu Gln Tyr Lys Ser Pro Arg Val Val Gly Thr 1 5 . 10 15

Val Ala Ser Leu Leu Leu Val Leu Pro Phe Lys Thr Val Trp His Leu
20 25 30

Ser Met Thr Arg Ile Ser Thr Gly Arg Leu Lys Tyr Phe Leu Cys Ala

Glu

<210> 140

<211> 132

<212> PRT

<213> Homo sapiens

<400> 140

Ser 1	Cys	Glu	Arg	Arg 5	Gly	Phe	Ile	Met	Ala 10	Asp	Asp	Leu	Lys	Arg 15	Phe
Leu	Tyr	Lys	Lys 20	Leu	Pro	Ser	Val	Glu 25	Gly	Leu	His	Ala	Ile 30	Val	Val
Ser	Asp	Arg 35	Asp	Gly	Val	Pro	Val 40	Ile	Lys	Val	Ala	Asn 45	Asp	Asn	Ala
Pro	Glu 50	His	Ala	Leu	Arg	Pro 55	Gly	Phe	Leu	Ser	Thr 60	Phe	Ala	Leu	Ala
Thr 65	Asp	Gln	Gly	Ser	Lys 70	Leu	Gly	Leu	Ser	Lys 75	Asn	Lys	Ser	Ile	Ile 80
Cys	Tyr	Tyr	Asn	Thr 85	Tyr	Gln	Val	Val	Gln 90	Phe	Asn	Arg	Leu	Pro 95	Leu
Val	Val	Ser	Phe 100	Ile	Ala	Ser	Ser	Ser 105	Ala	Asn	Thr	Gly	Leu 110	Ile	Val
Ser	Leu	Glu 115	Lys	Glu	Leu	Ala	Pro 120	Leu	Phe	Glu	Glu	Leu 125	Arg	Gln	Val
Val	Glu 130	Val	Ser												

<210> 141 <211> 126 <212> PRT

<213> Homo sapiens

<400> 141

Gln 1	Met	Ile	Leu	Leu 5	Phe	Leu	Glu	Ser	Pro	Ser	Leu	Leu	Pro	Trp 15	Ser
Val	Ala	Arg	Ala 20	Lys	Val	Asp	Lys	Lys 25	Pro	Gly	Arg	Lys	Ala 30	Cys	Ser
Gly	Ala	Leu 35	Ser	Phe	Ala	Thr	Leu 40	Ile	Thr	Gly	Thr	Pro 45	Ser	Leu	Ser
Asp	Thr 50	Thr	Met	Ala	Trp	Ser 55	Pro	Ser	Thr	Leu	Gly 60	Asn	Phe	Leu	Tyr
Lys 65	Asn	Arg	Phe	Arg	Ser 70	Ser	Ala	Met	Met	Asn 75	Pro	Leu	Leu	Ser	Gln 80
Asp	Gln	Ser	Pro	Arg 85	Leu	Gly	Phe	Leu	Gly 90	Cys	Leu	Val	Leu	Ser 95	Ala
Val	Thr	Ser	Gly 100	Thr	Ala	Leu	Lys	Thr 105	Gly	Ser	Ser	Ser	Ser 110	His	Arg
His	Met	Ile 115	His	Asp	Leu	Val	Cys 120	Ala	Pro	Gly	Ser	Thr 125	Phe		

<210> 142

Gly

Ser

Ser

Leu

100

Pro

<211> 142 <212> PRT <213> Homo sapiens <400> 142 Gly Trp Asp Leu Asn Met Ala Ala Val Val Lys Arg Ala 10 Ala Gly Gly Arg Asn Ala Val Leu Thr Ala Leu Lys Arg Arg Arg 25 Ile Leu Ala Gly Ala Thr Ala Asn Lys Ala Ser His Asn Arg Thr Gly 40 45 35 Glu Gly Glu Glu Gln Ser His Ser Ser Pro Lys Pro Ala Leu Arg Pro Glu Leu Glu Tyr Ile Pro Arg Lys Arg Gly Lys Asn Pro Leu Ser 75 80 70 Gly Trp Gly Ala Ile Gly Phe Cys Pro Met Lys Ala Val Leu Ala Pro 95 90 85 Glu Phe Ile Leu Thr Lys Arg Val Asp Lys Asp Arg Val Ile Leu Leu 100 105 110 Gln Asn Met Arg Leu Ser Asn Thr Gly Gln Met Lys Ala Arg Lys 115 120 Glu Ser Gln Phe Arg Ala Ser Ser Gln Ser Ala Pro Ser Pro Tyr Arg 140 135 Gln Asp Val Gly Ser Gly Val Thr 150 145 <210> 143 <211> 114 <212> PRT <213> Homo sapiens <400> 143 Pro Gln Val Cys Thr Pro Thr Ser Gly Glu Gly Arg Ser Ala Asp Pro 15 1 5 10 Gly Trp Leu Asp Ala Leu Glu Glu Ala Leu Asn Leu Trp Ser Tyr Ser 20 25 30 Pro Val Leu Met Phe Cys Arg Ala Phe Ile Cys Phe Thr Asp Asn Arg 45 35 40 Ser Arg Leu Val Arg Met Lys Ile Pro Ser Thr Ser Arg Arg Arg Leu 50 55 60 Gln Gly Ala Gln Ala Ser Pro Thr Ala Phe Met Gly Phe Lys Pro Met 65 75 80 Gly Ser Phe Leu Gly Met Tyr Ser Ser Ser Gly Asp Arg 95 90 85

Ser Gly Glu Leu

105

Trp Leu Cys Arg

Ala

110

Arg

Val

Leu Leu

<210> 144

<211> 267

<212> PRT

<213> Homo sapiens

<400> 144

Glu 1		Glu	ı Val	l Glu		ı Glu	Ser	Thr	Ala 10		Gln	Lys	Thr	Asp 15	Lys
Lys	Glu	ı Ile	Leu 20	4	Lys	Ser	Glu	Lys 25	Asp	Thr	Asn	Ser	Lys 30	Val	Lys
Pro	Lys	Gly 35	-	Val	Arg	Trp	Thr 40	Gly	Ser	Arg	Thr	Arg 45	Gly	Arg	Trp
Lys	Tyr 50		Ser	Asn	Asp	Glu 55	Ser	Glu	Gly	Ser	Gly 60	Ser	Glu	Lys	Ser
Ser 65	Ala	Ala	Ser	Glu	Glu 70	Glu	Glu	Glu	Lys	Glu 75	Ser	Glu	Glu	Ala	Ile 80
Leu	Ala	Asp	Asp	Asp 85	Glu	Pro	Cys	Lys	Lys 90	Cys	Gly	Leu	Pro	Asn 95	His
Pro	Glu	Leu	Ile 100	Leu	Leu	Cys	Asp	Ser 105	Cys	Asp	Ser	Gly	Tyr 110	His	Thr
Ala	Cys	Leu 115	Arg	Pro	Pro	Leu	Met 120	Ile	Ile	Pro	Asp	Gly 125	Glu	Trp	Phe
Cys	Pro 130	Pro	Cys	Gln	His	Lys 135	Leu	Leu	Cys	Glu	Lys 140	Leu	Glu	Glu	Gln
Leu 145	Gln	Asp	Leu	Asp	Val 150	Ala	Leu	Lys	Lys	Lys 155	Glu	Arg	Ala	Glu	Arg 160
Arg	Lys	Glu	Arg	Leu 165	Val	Tyr	Val	Gly	Ile 170	Ser	Ile	Glu	Asn	Ile 175	Ile
Pro	Pro	Gln	Glu 180	Pro	Asp	Phe	Ser	Glu 185	Asp	Gln	Glu	Glu	Lys 190	Lys	Lys
Asp	Ser	Lys 195	Lys	Ser	Lys	Ala	Asn 200	Leu	Leu	Glu	Arg	Arg 205	Ser	Thr	Arg
Thr	Arg 210	Lys	Cys	Ile	Ser	Tyr 215	Arg	Phe	Asp	Glu	Phe 220	Asp	Glu	Ala	Ile
Asp 225	Glu	Ala	Ile	Glu	Asp 230	Asp	Ile	Lys	Glu	Ala 235	Asp	Gly	Gly	Gly	Val 240
Gly	Arg	Gly	Lys	Asp 245	Ile	Ser	Thr	Ile	Thr 250	Gly	His	Arg	Gly	Lys 255	Asp
Ile	Ser	Thr	Ile 260	Leu	Asp	Glu	Lys	Ile 265	Ile	Thr					

<210> 145

<211> 185

<212> PRT

<213> Homo sapiens

<400> 145

Ser · 1	Ser	Glu	Lys	Ser 5	Gly	Ser	Cys	Gly	Gly 10	Met	Met	Phe	Ser	Ile 15	Leu
Ile	Pro	Thr	Tyr 20	Thr	Lys	Arg	Ser	Phe 25	Leu	Arg	Ser	Ala	Arg 30	Ser	Phe
Phe	Phe	Lys 35	Ala	Thr	Ser	Lys	Ser 40	Cys	Asn	Cys	Ser	Ser 45	Asn	Phe	Ser
Gln	Ser 50	Ser	Leu	Cys	Trp	Gln 55	Gly	Gly	Gln	Asn	His 60	Ser	Pro	Ser	Gly
Met 65	Ile	Ile	Arg	Gly	Gly 70	Arg	Arg	Gln	Ala	Val 75	Trp	Tyr	Pro	Leu	Ser 80
Gln	Glu	Ser	His	Arg 85	Arg	Ile	Ser	Ser	Gly 90	Trp	Phe	Gly	Arg	Pro 95	His
Phe	Leu	His	Gly 100	Ser	Ser	Ser	Ser	Ala 105	Arg	Met	Ala	Ser	Ser 110	Leu	Ser
Phe	Ser	Ser 115	Ser	Ser	Ser	Glu	Ala 120	Ala	Asp	Asp	Phe	Ser 125	Leu	Pro	Asp
Pro	Ser 130	Leu	Ser	Ser	Leu	Leu 135	Glu	Tyr	Phe	His	Leu 140	Pro	Arg	Val	Arg
Glu 145	Pro	Val	His	Arg	Thr 150	Leu	Pro	Leu	Gly	Phe 155	Thr	Leu	Glu	Phe	Val 160
Ser	Phe	Ser	Asp	Phe 165	Phe	Lys	Ile	Ser	Phe 170	Leu	Ser	Val	Phe	Cys 175	Lys
Ala	Val	Asp	Ser 180	Ser	Ser	Thr	Ser	Ser 185			·		X.		

<210> 146

<400> 146

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<210> 147

<400> 147

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<210> 148

<211> 134

<212> PRT

<213> Homo sapiens

<400> 148

Ser Ala Met Lys Asp Pro Ser Arg Ser Ser Thr Lys Arg Gln Pro Thr 15 10 5 Ile Asn Gly His Ser His Ile Asn Glu Asp Val Ile Ser Pro Ser Ile 25 20 Glu Asp Asp Asn Pro Phe Ala Glu Tyr Met Trp Met Glu Asn Glu Glu

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35 40 45 Arg Gln Ile Glu Glu Leu Trp Glu Glu Phe Ile Glu Phe Asn Glu Arg Cys Phe Gln Glu Met Leu Glu Glu Glu Glu Glu His Trp 75 Phe Ile Pro Ala Arg Asp Leu Pro Gln Thr Met Asp Gln Ile Gln Asp 85 90 95 Ile Ser Asp Gly Ser Ser Glu Gln Phe Asn Asp Leu Val Leu Asp Leu 100 105 110 Asn Pro Asn Ala Lys Glu Phe Val Pro Val Val Lys Ser Asn Leu Gly 120 115 125 Val Lys Tyr Gly Asn Ile 130 <210> 149 <211> 135 <212> PRT <213> Homo sapiens <400> 149 His Ser Asp Lys Arg Ala Phe Thr Ile Lys Ser Ser Asn Thr Ala Phe 10 Val Trp Lys Leu Cys Tyr Ile His Gln Lys Arg Ala Pro Ser Thr 25 30 Ile Phe Pro Tyr Phe Thr Pro Gly Thr Asn Ser Phe Ala Phe 35 40 Thr Ser Ser Arg Glu Phe Arg Thr Arg Glu Leu Leu Leu Pro Ser 50 55 60 Ile Thr Asn Trp Ser Trp Ile Trp Ser Ile Cys Arg Ser Leu Val Gly 65 70 75 80 Arg Ala Gly Ile Asn His Ser Cys Ser Ser Ser Ser Ser Ser Trp Lys Gln Arg Ser Ile Asn Ser Ser Ser His 100 105 Ile Cys Ser Ser Phe Ser Ile His Met Ser Leu Leu Asn Ser Tyr Ser 120 125 Ala Asn Gly Leu Ser Ser Ser 130 135 <210> 150 <211> 58 <212> PRT <213> Homo sapiens <400> 150 Leu Val Ser Gly Ala Asn Gln Cys Gly Ser Cys Asn Ser Lys Ser Phe 1 10

Leu Thr Lys Ala Trp Tyr Tyr Arg Val Gly Phe Arg Phe Phe Arg Gly 20 25 Gly Leu Phe Asp Phe Asp Phe Phe Phe Phe Tyr Val Ile Phe Gly Lys 40 45 Thr His Ser Glu Leu Tyr Leu Val Ser Thr 55 <210> 151 <211> 61 <212> PRT <213> Homo sapiens <400> 151 Phe Phe Val Leu Lys Ser Leu Leu Val Gly Ala Cys Tyr Trp Glu Gln 10 Val Phe Val Gln Lys Leu Gln Ser Glu Ser Leu Cys Thr Glu Ile Thr 20 25 30 Ile Thr Phe Leu Ser Pro Gln Lys Val Gly Leu Leu Leu Ser Leu Thr 35 40 Asn Lys Ile Ile Cys Ile Leu Ile Tyr Leu Lys Cys 50 55 60 <210> 152 <211> 60 <212> PRT <213> Homo sapiens <400> 152 Ser Ala Cys Lys Phe Leu Arg Asp Leu Pro Leu Leu Thr Val Asp Gln 10 15 Met Tyr Leu Thr Cys Ile Ile Lys Ala Leu Asn Lys Ser Leu Trp Leu 20 25 Ile Thr Ala Lys Met Gly Thr Arg His Leu Leu Cys Val Leu Val 35 40 Ala Val Ala Leu Arg Ala Val Arg Pro Cys Leu Ile 50 55 <210> 153 <211> 56 <212> PRT <213> Homo sapiens <400> 153 Lys Arg Asp Ile Ile Leu Asn Val Phe Ser Gln Arg Ser His Lys Arg 5 10 15 Asn Gln Ile Asn His His Glu Lys Asn Glu Lys Lys Asn Gln Thr Pro 25 30 His Gly Asn Thr Lys Leu Trp Leu Gly Ser Ser Tyr Tyr Tyr Ser Ser 35 40 45

50

His Ile Gly Trp Arg Arg Lys Pro <210> 154 <400> 154 000 <210> 155 <211> 150 <212> PRT <213> Homo sapiens <400> 155 Leu His Gly Arg Ala Asp Pro Leu Gly Trp Ser Ile Pro Val His Arg Gly Val Ile Thr Ser Leu Gly Ala Gly Leu Arg Ile Val Ser Asp Leu 25 30 Ser Leu Gly Arg Val Gly Gly Leu Pro Ala Arg Arg Leu His Arg Leu 45 40 35 Arg Gly Arg Gly Val Trp Leu Glu Leu Gly His Arg Asp Ala Pro Arg 55 50 Ala Gln Arg Pro Arg Thr Pro Gly Pro Gly Ala Ser Ala Leu Trp 65 75 80 Glu Ala Pro Arg Arg Gly Pro Ser Pro Ser Ala Asp Ala Cys Val Cys 90 Pro Pro Pro Gly Arg Ala Gly Asp Pro Ser Pro Pro Asp Ala 110 105 Gly 'Ala Ala Thr Lys Ala Gly Pro Ala Gly Pro Arg Gly Ala Ser 115 120 125 Val Asp Pro Glu Leu Arg Leu Pro Pro Pro His Pro Gly Gln Leu Arg 140 130 135 Pro Arg Gly Asp Arg Glu 150 145 <210> 156 <211> 81 <212> PRT <213> Homo sapiens <400> 156 Leu Pro Val Ala Ala Gly Gly Arg Gly Gln Asp Ala Gln Leu Arg Pro 10 1 Val Ser Arg Pro Glu Leu Arg Leu Gly Gly Gly Ala Pro Ser Gly Val 25 30 20 Ser Arg Gly Arg Arg Ile Gly Trp Ala Arg Val Ser Ser Pro Ala Gly Arg Arg Asp Arg Val Cys Gly Gly Leu Gly Ala Ser

55

Gly Arg Ala His Ala Gly Gly Ala Ala Arg Gly Ala Gly Pro Leu Arg 70 75 80 Gly <2.10> 157 <211> 214 <212> PRT <213> Homo sapiens <400> 157 Pro Gly Ser Gln Ser Val Thr Pro Pro Met Ala Glu Pro Leu Gln 10 15 Pro Gly Ala Ala Glu Ala Ala Ala  ${\tt Glu}$ Asp Asp Gln Ala Val Thr Pro 20 25 30 Gly Lys Ala Pro Glu Asp Ala Gly Pro Ser Tyr Gln Pro Gly Glu Ile Arg His Tyr Gly Pro Ala Lys Trp Val Ser Thr Ser Val Glu Ser Met Asp Trp Asp Ser Ala Ile Gln Thr Gly Phe Thr Lys Leu Asn Ser 65 75 80 Gly Glu Lys Tyr Ile Gln Lys Asn Glu Met Lys Ile Lys Met Thr Ala 90 Gly Val Thr Ser Tyr Val Glu Pro Ser Gly Pro Phe Ser Glu Ser 100 105 Thr Ile Thr Ile Ser Leu Tyr Ile Pro Ser Glu Gln Gln Phe qaA Pro 115 120 Arg Pro Leu Glu Ser Asp Val Phe Pro Ile Glu Asp Arg Ala Glu 130 135 140 Thr Val Val Phe Ser Phe Asp Phe Arg Gly Ser Ser Ala Gln Lys Asn 145 150 155 160 Gln Glu Gln Leu Leu Thr Leu Ala Ser Ile Leu Arg Glu Asp Gly Lys 165 170 175 Glu Gly Val Phe Asp Lys Val Tyr Tyr Thr Ala Tyr Asn Ser Pro Val Leu Leu Asn Asn Asn Glu Lys Arg Val Trp Leu Ile Gln Lys Asn 195 200 205 Pro Thr Lys Glu Asn Glu 210 <210> 158 <211> 62 <212> PRT <213> Homo sapiens <400> 158

Pro Asn Phe Tyr Arg Gly Phe Ile Phe Asn Leu Thr Met Cys Gly Gly

5 1 10 15 Ser Cys Leu Asn Leu Phe Arg Ala Val Cys Ser Val His Gln Met 25 30 Arg Ser Gly Met Gly His Leu Arg Pro Phe Arg Ser Gly Leu Asn 45 Arg Met Leu Glu Pro Arg Leu Asp Ser Thr Asp Leu Arg Phe 55 <210> 159 <211> 104 <212> PRT <213> Homo sapiens <400> 159 Ile His Leu Pro Lys Lys Leu Ile Ser Phe Tyr Leu Arg Gly Glu Val 1 10 15 Ser Gly Gln Phe Phe Ser Ser Glu Ser Lys His Leu Ile Cys Trp Val 20 25 Trp Lys Thr Pro Phe Leu Ala Phe Tyr Val Ser His Leu Asn Asn Ser 35 40 45 Lys Gln Glu Gly Lys Gln Lys Thr Lys Lys Lys Lys Gly Lys Lys 55 60 His Gly Leu Val Ser Leu Thr Lys His Val Gly Ala Val 65 75 80 Cys Leu Gly Gly Ala Gly Tyr Arg Thr Cys Gln Cys Leu Gly Phe Ser 90 Ile Asn Leu Ala Arg Asp Ile Lys 100 <210> 160 <211> 80 <212> PRT <213> Homo sapiens <400> 160 Ser Leu Leu Ile Ser Arg Lys Ile Lys Gln Asn Thr Ser Pro Ala Arg 1 10 Leu Thr Cys Val Tyr Ile Tyr Ile Lys Gln Arg Ala Thr Pro Thr Ser 20 25 30 Gly Gln Gln Leu Glu Ile Ser Ala Val His Ala Val Val Cys Gln 35 45 Gly Glu Ile Thr Trp Trp Lys Pro Lys Asn Asn Leu Leu Ala Gly 50 55 60 Asn Phe Ile Cys Ile Lys Ser Val Leu Gln Lys Asn Pro Cys Gly 65 70 75 80

<210> 161 <400> 161

Leu Phe Phe Leu Phe

Ile

20

His Trp Met Thr

1

Arg Val Leu

000 <210> 162 <400> 162 000 <210> 163 <211> 75 <212> PRT <213> Homo sapiens <400> 163 Ile Asp Glu Ala Glu Glu Ser Gln Arg Leu Leu Lys Pro Ser Leu Val 10 15 Val Met Trp Phe Ser Phe Leu Lys Lys Leu Phe Leu Glu Ser Arg Ile 25 Tyr Gly Tyr Asn Val Cys Ser Leu Phe Val His Lys Ile Lys Pro 35 45 Lys Lys Leu Lys Lys Lys Lys Lys Arg Gly Glu Lys Lys Arg Glu Lys 50 55 Gly Lys Gly Lys Arg Lys Arg Arg Gly Glu Glu 70 <210> 164 <211> 68 <212> PRT <213> Homo sapiens <400> 164 Lys Tyr Leu Thr Leu Pro Tyr Lys Leu Leu Val Pro Phe Cys Ile Pro 5 15 Pro Ser Ile Thr Leu Thr Lys Gly Ile Phe Tyr Cys Glu Lys Tyr Phe 20 25 Ile Leu Tyr Ile Thr Ser His Glu Phe Leu Pro Leu Val Thr Ile 35 40 Met Leu Pro Ser Ala Ile Ile Gln Ile Ala Gln Pro Phe Tyr Val 5.0 60 Asn Ser Leu Leu 65 <210> 165 <211> 66 <212> PRT <213> Homo sapiens <400> 165

Arg Tyr His Thr Val Pro Leu Pro Pro Lys

10

Leu

25

Gly

15

Cys Gln Thr Gln Met Lys Leu

30

Met Ala Ile Pro Leu Val Phe Gln Ile Met Phe Gly Ile Leu Asn Gly 35 40 45

Leu Tyr His Tyr Ala Val Phe Glu Glu Thr Leu Glu Lys Thr Ile His 50 55 60

Glu Glu 65

<210> 166

<211> 159

<212> PRT

<213> Homo sapiens

<400> 166

Thr Arg Leu Lys Gly Asp Arg Gly Gly Val His Phe Leu Lys Ala 10 Arg Arg Gly Gly Leu Arg Ala Ser Leu Leu Tyr Leu Leu Glu Lys Tyr 30 Arg Leu Val Phe Leu Leu Ser Ile Cys Val Arg Gly Met Val Ser Ser 35 40 45 Val Lys Ser Phe Val Gly Glu Leu Gln Leu Leu Ser Ile Ser Glu Pro 50 55 Arg Phe Val Lys Met Ser Cys Lys Cys Phe Ser Leu Ser Thr Thr Ser 65 70 75 80 Thr Phe Val Pro Ile Ser Ser Asp Ser Lys Lys Val Ser Ser Tyr Phe 85 90 95 Cys Ser Glu Ser Leu Ala Glu Gln Asn Leu Phe Met Met Pro 100 105 110 Glu Val Phe Cys Ser Glu Gln Lys Phe Pro Asp Glu Leu Asn Asp Leu 115 120 125 Phe Phe Ser Phe Thr Arg Leu Phe Ser Ser Leu Val Thr Leu Arg Val

140

Ser Glu Met Gln Thr Val Leu Ser Ser

155

135

<210> 167

145

<211> 439

<212> PRT

<213> Homo sapiens

130

Pro His Ala

Pro

Ala

150

<400> 167

Lys Ser Leu Leu Phe Thr Ser Ser Lys Phe Pro Leu Ile Ser Phe Ser 1 5 10 15 Pro Gln Gly Leu Lys Phe Arg Ser Lys Ser Ser Leu Ala Tyr 20 25 30 Leu His Lys Asn Gly Glu Thr Ser Leu Lys Pro Glu Asp Phe Phe Asp 35 40 45 Thr Val Leu Ser Lys Arg Gly Ile Lys Ser Arg Tyr Lys Asp Cys Ser

50 55 60 Met Ala Ala Leu Thr Ser His Leu Gln Asn Gln Ser Asn Asn Ser Asn 65 75 80 Trp Thr Asn Leu Arg Arg Ser Lys Cys Asp Lys Lys Val Phe Met Pro 85 90 95 Pro Ser Ser Ser Ser Glu Leu Gln Glu Ser Arg Gly Leu Ser Asn Phe 100 105 110 Thr Ser Thr His Leu Leu Leu Lys Glu Asp Glu Gly Val Asp Asp Val 115 120 Asn Phe Arg Arq Lys Val Lys Pro Gly Lys Lys Val Thr Ile Leu Lys 130 135 140 Gly Ile Pro Ile Lys Lys Thr Gly Lys Lys Cys Arg Lys Ser Ser 145 150 155 160 Gly Phe Val Gln Ser Asp Ser Lys Arg Glu Ser Cys Val Asn Lys Ala 165 170 175 Asp Ala Glu Ser Glu Pro Val Ala Gln Lys Ser Gln Leu Arg Asp Thr 185 190 Val Cys Ile Ser Asp Ala Gly Ala Cys Glu Gly Thr Leu Ser Val Thr 195 200 205 Ser Glu Glu Asn Ser Leu Val Lys Lys Lys Glu Arg Ser Leu Ser Ser 210 215 220 Gly Ser Asn Phe Ser Glu Gln Lys Ser Cys Thr Gly Ile Ile Asn Lys 225 235 240 Phe Cys Ser Ala Lys Asp Ser Glu His Asn Glu Lys Tyr Glu Asp Thr 245 250 255 Phe Glu Ser Glu Glu Ile Gly Thr Lys Val Glu Val Val Glu Arg 260 265 Glu His Lys Leu His Thr Asp Ile Leu Lys Arg Gly Ser Glu Met Asp 275 280 285 Asn Asn Cys Ser Pro Thr Arg Lys Asp Phe Thr Glu Asp Thr Ile Pro 295 300 Glu Arg Arg Thr Gln Ile Arg Lys Thr Ser Leu Tyr Phe Ser Ser Lys 305 310 315 320 Lys Glu Ala Leu Ser Pro Pro Arg Arg Lys Lys Ala Phe Lys 325 330 335 Trp Thr Pro Pro Arg Ser Pro Phe Asn Leu Val Gln Glu Thr Leu Phe 340 345 350 His Asp Pro Trp Lys Leu Leu Ile Ala Thr Ile Phe Leu Asn Arg Thr 360 365 Ser Gly Lys Met Ala Ile Pro Val Leu Trp Lys Phe Leu Glu Lys Tyr 370 375 380 Pro Ser Ala Glu Val Ala Arg Thr Ala Asp Trp Arg Asp Val Ser Glu

385 390 395 400 Leu Lys Pro Leu Gly Leu Tyr Asp Leu Arg Ala Lys Thr Ile Val Leu 405 410 415 Trp Lys Lys Phe Ser Asp Glu Tyr Leu Thr Lys Gln Tyr Pro Ile 420 425 430 Leu His Gly Ile Gly Ala Pro 435 <210> 168 <211> 90 <212> PRT <213> Homo sapiens <400> 168 Lys Val Gln Thr Gln Met Gln Phe Ala Leu Thr Asn Phe 10 Ser Leu Gly Ile Leu Cys Lys Thr Pro Val Leu Ser Phe Leu Leu Pro 20 25 3.0 Gln Asp Arq Val Gln Ser Phe Leu Lys His Ala Arg Cys Leu Pro His Asp Gly Val Thr Val Leu Arg His Cys Phe Leu Lys His Lys Ala Lys 50 55 Lys Asp Gln Met Leu Arg Ala Ser Asn Leu Tyr Leu Thr Thr Trp 65 70 75 80 Lys Ser Leu Gln His Thr Trp His Trp Gln 85 <210> 169 <211> 92 <212> PRT <213> Homo sapiens <400> 169 Phe Cys Gln Cys His Val Gln Val Val Arg Tyr Lys 5 Ala Ser Ile Trp Ser Phe Phe Ala Leu Thr Leu Asp Trp Pro 20 25 30 Val Ser Thr Lys Gln Cys Arg Cys Gly His Leu Leu Arg Ala Cys Phe 35 40 45 Lys Glu Arg Arg Leu Cys Thr Leu Ser Cys Gly Arg Lys Thr Gly Leu His Lys Glu Ile Ser Pro Arg Lys Leu Val Asn Ala Asn Cys Ile 65 70 75 80 Val Cys Cys Thr Leu Pro Gln Ser Tyr Ile Val Phe 85 90

<210> 170

<211> 91

<212> PRT

<213> Homo sapiens

<400> 170

Ala 1	Asp	Ser	His	Gln 5	Asn	Tyr	Ile	Pro	Trp 10	Pro	Pro	Ala	Cys	Val 15	Leu
Leu	Ala	Arg	Pro 20	Trp	Leu	Ala	Ser	Leu 25	Thr	Arg	Glu	Lys	Asp 30	Leu	Gln
Lys	Ile	Arg 35	Leu	Trp	Asp	His	Phe 40	Val	Cys	Ala	Leu	Gly 45	Met	Thr	Phe
Phe	Pro 50	Thr	Pro	Gly	Lys	Pro 55	Leu	Gly	Leu	Ser	Glu 60	Thr	Leu	Trp	Leu
Ala 65	Asn	His	Met	Val	Ser 70	Leu	Lys	Val	Glu	Arg 75	Leu	Ser	Asn	Pro	Pro 80
Ile	Pro	Arg	Glu	Phe 85	Gln	Ser	Val	Asp	Val 90	Ile					

<210> 171

<211> 95

<212> PRT

<213> Homo sapiens

<400> 171

Asn 1	Gly	Gly	Leu	Asn 5	Ala	His	Leu	Ala	Ser 10	Ala	Ser	Glu	Phe	Asp 15	His
Ser	Gly	Val	Gln 20	Leu	Ile	Glu	Arg	Glu 25	Glu	Glu	Ile	Cys	Ile 30	Phe	Tyr
Glu	Lys	Ile 35	Asn	Ile	Gln	Glu	Lys 40	Met	Lys	Leu	Asn	Gly 45	Glu	Ile	Glu
Ile	His 50	Leu	Leu	Glu	Glu	Lys 55	Ile	Gln	Phe	Leu	Lys 60	Met	Lys	Ile	Ala
Glu 65	Lys	Gln	Arg	Gln	Ile 70	Cys	Val	Thr	Gln	Lys 75	Leu	Leu	Pro	Ala	Lys 80
Arg	Ser	Leu	Asp	Ala 85	Asp	Leu	Ala	Val	Leu 90	Gln	Ile	Gln	Phe	Ser 95	

<210> 172

<211> 90

<212> PRT

<213> Homo sapiens

<400> 172

Lys 1	Thr	Glu		Gly 5		Gln	Leu		Arg 10	His	Pro	Gly	Thr	Ser 15	Trp
Leu	Ala	Val	Ile 20	Ser	Gly	Ser		Lys 25	Phe	Val	Phe	Ala	Ser 30	Gln	Gln
Ser	Ser	Phe 35		Gly	Ile	Gly	Ser 40	Phe	Leu	Pro	Val	Asp 45	Val	Phe	Gln

His Leu Val Ser Ser Ser Leu Gly Tyr Leu Phe Leu Phe Phe His Lys 55 Lys Cys Ile Phe Leu Leu Pro Ala Leu Ser Ala Glu Arg His Gly Tyr 65 70 75 80 Gln Ile Gln Arg Gln Arg Leu Ser Gly His <210> 173 <211> 102 <212> PRT <213> Homo sapiens

<400> 173

Ala Val Arg Ser Arg Gly Ala Leu Ser Leu Ser Val Gly Ala Ala Cys 10 Gly Leu Val Ala Leu Trp Gln Arg Arg Arg Gln Asp Ser Gly Thr Met 20 30 Phe Gly Ser Ser Thr Glu Glu Arg Ala Ala Pro Phe Ser Leu Glu Tyr 35 40 Arg Phe Val Leu Glu Lys Lys Asn Gly Gln Tyr Ile Ser Pro Phe His 50 55 Asp Ile Pro Ile Tyr Ala Asp Lys Val Arg His Pro Cys Phe Thr Trp 65 70 75 80 Asp Gln Leu Val Leu His Met Asn Ser Leu Tyr Phe Leu Ile 90 95 Cys Leu Ser Thr Ser Ala 100

<210> 174

<211> 73

<212> PRT

<213> Homo sapiens

<400> 174

Val Lys Arg Leu Cys Pro Lys Thr Arg Met Pro Tyr Leu Ile Cys Ile 1 5 10 Asn Trp Asn Ile Met Lys Trp Arg Tyr Ile Leu Ser Phe Leu Ile Phe 20 25 30 Glu Glu Asp Ser Val Leu Gln Gly Glu Gly Arg Gly Ala Leu Gly Leu 35 Ala Glu Ala Ala His Ser Ala Gly Val Leu Pro Pro Pro Leu Pro Gln 55 60 Ser His Gln Pro Ala Arg Gly Ala Asp 65 70

<210> 175

<211> 130

<212> PRT

<213> Homo sapiens

<400> 175

Arg 1	Arg	Gln	Arg	Lys 5	Ala	Glu	Pro	Gly	Ala 10	Cys	Ala	Leu	Gly	Arg 15	Val
Gly	Ser	Glu	Cys 20	Ile	Pro	Glu	Pro	Gly 25	Ala	Arg	Arg	Thr	Ala 30	Gln	Ala
Ala	Gly	Leu 35	Arg	Ser	Val	Ser	Gly 40	Ala	Ala	Asn	Thr	Lys 45	Val	Arg	Glu
Leu	Lys 50	His	Phe	Arg	Phe	Leu 55	Gly	Leu	Leu	Arg	Ser 60	Cys	Arg	Ser	Glu
Met 65	Glu	Val	Asp	Ala	Pro 70	Gly	Val	Asp	Gly	Arg 75	Asp	Gly	Leu	Arg	Glu 80
Arg	Arg	Gly	Phe	Ser 85	Glu	Gly	Gly	Arg	Gln 90	Asn	Phe	Asp	Val	Àrg 95	Pro
Gln	Ser	Gly	Ala 100	Asn	Gly	Leu	Pro	Lys 105	His	Ser	Tyr	Trp	Leu 110	Asp	Leu
Trp	Leu	Phe 115	Ile	Leu	Phe	Asp	Val 120	Val	Val	Phe	Leu	Phe 125	Val	Tyr	Phe
Leu	Pro 130														
<210><211><211><212><213>	62 PRT	sapie	ns												
<400>	176														
Ile 1	Leu	Lys	Met	Ala 5	Thr	Asn	Phe	Leu	Asn 10	Lys	Glu	Asp	Arg	Thr 15	Leu
Asn	Arg	Arg	Ile	Ser	His	Leu	Gln	Gly	Thr	Leu	Pro	Phe	Ile	Leu	His

<210> 177

<211> 174

<212> PRT

<213> Homo sapiens

50

20

35

<400> 177

Ala Val Tyr Cys Ile Leu His Gln Gln Lys Val Leu Arg Leu Tyr Lys 15

Arg Ala Leu Arg His Leu Glu Ser Trp Cys Val Gln Arg Asp Lys Tyr 25

25

Phe Val Thr Asn Leu Gln Asn Ser Ile Asn Trp Val Gly Phe His Pro

40

Phe Leu Ala Lys Phe Leu Lys Leu Asn Pro Leu Val Arg Val

55

Tyr Phe Ala Cys Leu Met Arg Ala Arg Phe Glu Glu Arg His Lys Asn 35 40 45 Glu Lys Asp Met Ala Lys Ala Thr Gln Leu Leu Lys Glu Ala Glu 55 Gln Glu Phe His Pro Gln Ile Trp Tyr Arq Pro Tyr Phe Pro 65 70 75 80 Pro Gly Gly Thr Ser Tyr Glu Tyr Arg Asp Cys Tyr Lys Val Pro Glu 85 90 95 Trp Cys Leu Asp Asp Trp His Pro Ser Glu Lys Ala Met Tyr Pro Asp 100 105 110 Phe Ala Gln Trp Arg Tyr Lys Arg Glu Lys Lys Leu Glu Ser Trp Arg 115 120 125 Glu Gln Leu Gln Glu Arg Glu Val Lys Glu Thr Pro Pro Gly Gly Pro 130 135 140 Ala Pro Leu Thr Glu Pro Ala Glu Gly Leu Leu Arg Lys Asp Pro Pro 145 150 155 160 Trp Trp Ile Val Leu Tyr Thr Arg Pro Arg Glu Arg Pro Met 165 170

<210> 178

<211> 131

<212> PRT

<213> Homo sapiens

<400> 178 -

Ser Pro Leu Val Phe Pro Ser Ala Val Ser Ser Thr Val Pro Leu Ser 10 15 Gln Asp Trp Gln Ser Asn Thr Leu Pro Ser Gln Lys Asp Ala Ser His 25 Leu Thr Ile Leu Gly Pro Cys Ser Asn Arg Ile Ser His Arg Arg 35 40 Pro Cys Gln Glu Gln Gly Ala Val Ser Arg Cys Met Asp Ala Asp 50 55 60 Thr Arg Gly Pro Pro Ala Trp Arg Ile Leu Pro Ser Ala Pro Ser Pro 65 70 75 80 Ser Tyr Pro Phe His Tyr Val Leu Gln Thr Gly Leu Ser Ser Asn Lys 85 90 95 Gly Thr 'Thr Gln Ser Ile Ile Cys Leu Ser Gly Arg Thr Arg Gly Gly 100 105 110 Val Ala Pro Ala Tyr Lys Ala Ala Thr Pro Phe Ala Asp Val Val Cys 115 120 125

Asn Ile Arg

<210> 179

<211> 80

1

<212> PRT <213> Homo sapiens <400> 179 Ile Tyr Ala Leu Ser Asn Glu Phe Ala Phe Lys Leu Met Met Thr 10 Glu Glu Gln Leu Asn Ser Phe Phe Pro Leu Leu Ser Val Gln Leu Trp 20 25 30 His Ala Gln Arg Phe Leu Leu Asp Ser Ser Trp Ser Gly Val Ile Pro 40 Phe Phe Phe Ser Cys Ser Cys Leu Pro Phe Leu Tyr Pro Pro Trp Lys 50 55 Gln Gln Arg Ile His Asp Leu Lys Asp Thr Tyr Leu Leu Asn Ser Ser 65 70 75 80 <210> 180 <211> 140 <212> PRT <213> Homo sapiens <400> 180 Lys Val Leu Arg Lys Leu Lys Gly Pro Glu Glu Ala Ser Gly Gln Met Ala Gly Ala Gly Pro Thr Met Leu Leu Arg Glu Glu Asn Gly Cys Cys 30 Ser Arg Gln Ser Arg Ser Ser Ser Ala Gly Asp Ser Asp Gly Glu Arg 35 40 Ala Asp Ser Ala Ala Glu Arg Arg Gln Gln Leu Glu Ala Leu Leu 50 55 Arg Asn Lys Thr Met Arg Ile Arg Met Thr Asp Gly Thr Leu Val Gly 65 70 75 80 Phe Thr Cys Leu Cys Asp Val Arg Asp Cys Asn Ile Leu Gly Ser 85 90 95 Gln Glu Phe Leu Ser Lys Pro Ser Asp Phe Ser Ala Gly Glu Pro Arg 100 105 110 Leu Gly Leu Ala Met Val Pro Gly His His Ile Val Ser Ile Glu 120 125 Val Gln Arg Glu Ser Leu Thr Gly Pro Pro Tyr Leu 130 135 140 <210> 181 <211> 114 <212> PRT <213> Homo sapiens <400> 181

Ser Leu Lys Gly Lys Arg His Arg Gly Gln Arg Tyr Gly Gly Pro Val

10

5

35

Arg Leu Ser Leu Cys Thr Ser Met Glu Thr Met Trp Cys Pro Gly Thr 20 25 Ala Arg Met Pro Ser Thr Arg Gly Ser Pro Ala Glu Lys Glu Ser Asp 35 45 Gly Glu Pro Leu Arg Asn Ser Cys Ala Arg Met Thr Leu Gln Ser Ser Val Gln Gln Arg Pro Lys Thr Ser Val Pro Arg Ser Val Met Arg 65 70 80 Met Ile Val Arq Leu Leu Ser Ser Ala Ser Ser Cys Cys Arg Ala Arg 90 95 Ala Glu Ser Ser Arg Ser Pro Ser Glu Ser Pro Ala Leu 100 105 110 Leu Leu <210> 182 <211> 95 <212> PRT <213> Homo sapiens <400> 182 Leu Ser Arg Leu Thr Glu Pro Lys Glu Asp Pro Met Ala Gly Ile 10 15 Ser Thr Ala Glu His Leu Asp His Pro Ala Ala Leu Pro Thr Thr Gln 20 25 30 Leu Ser Arg His Ser Arg Pro Gln Val Ile Ser Thr Asp Gly Gly 40 45 Glu Thr Arg Gly Cys Gly Arg Gln Glu Arg Lys Ala Glu Arg Arg Val 50 Cys Lys Phe Asn Ala Lys Val Thr Pro Ile Val Gly Gly Lys Cys Gln 65 Arg His Trp Cys His Arg Gln Ser Glu His Leu Glu Leu Phe Cys 85 <210> 183 <211> 131 <212> PRT <213> Homo sapiens <400> 183 Arg Arg Val Gln His Pro Pro Phe Phe Ser Gln Leu Ile Arg Asp Ala 10 Ala Lys Arg Thr Phe Arg Arg Ile Thr Leu Gln Ala Phe Ser Lys Tyr 25 30 Val Val Leu Tyr Val Tyr Leu Asn Gly Ser Met Leu Pro Val Pro Ser

40

Pro Cys Pro Leu Cys Gln Pro Pro Val Ala Leu Val Leu Val

45

Ser

50 55 60 Ser Ser Ala Lys Arg Pro Trp Asn Leu Asn Gly Gly Cys Phe Ala 65 75 Trp Leu Gly Gly Ser Cys Gln Trp Asp Ser Phe Asp Lys Pro Pro 90 95 Pro Trp Trp His Leu Ser Trp Lys Asp Val Thr Thr Gly Pro Ala Gln 100 105 110 Thr Ala Cys Gly Thr Ser Ala Phe Gly Ile Phe Ser Arg Leu Pro Gln 115 120 125 Trp Gly Arg 130 <210> 184 <211> 128 <212> PRT <213> Homo sapiens <400> 184 Ala Pro Cys Cys Arg Cys Pro Ala Pro Val Pro Ser Val Asn Pro 10 Leu Ser Leu Trp Cys Trp Phe Arg Ser Arg Leu Gln Gln Asn Asp Leu 25 Gly Thr Ser Met Gly Ala Leu Leu Ala Trp Glu Val Gly Leu Val Gly 35 40 45 Thr Arg Ala Leu Thr Asn Leu Leu Leu Leu Gly Gly Thr Ser Pro Gly 55 60 Arg Thr Ser Gln Gln Val Leu Leu Arg Leu Pro Val Ala Ala Glu Pro 65 70 80 Val Pro Leu Phe Ala Ser Ser His Asn Gly Glu Gly Asp Phe Gly Ile 90 Thr Leu Asn Ser Ser Ser Leu Gly Leu Leu Leu Pro Ser Thr Ser 100 105 110 Arg Phe Ser Ser Ile Cys Ala Tyr Leu Arg Tyr Thr Val Ser Ala 115 120 125 <210> 185 <211> 75 <212> PRT <213> Homo sapiens <400> 185 Asp Ser Arg Val Cys Phe Ser Gly Asn Tyr Arg Lys Leu Val Tyr Leu 10 15 Pro Arg Lys Thr Gly Ala Ile Arg Asn Gly Ser Asn Ile Ser Lys 25 30 Arg Lys Gln Asp Val Leu Ser Phe Ala His Leu Gly Phe Leu Leu Phe 35 40 45

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Pro Phe Ser Leu Phe Ser Leu Arg Ser Leu Phe Gln Phe Pro Ser Asp 55 50 60 Leu Pro Leu Val Pro Leu Glu Ser Gln Arg Leu 65 70 <210> 186 <211> 62 <212> PRT <213> Homo sapiens <400> 186 Leu Gly Asp Ser Glu Ser Met Pro Leu Leu Ala Leu Lys Cys Pro Val 10 Arg Leu Leu Gly Thr Leu Glu Pro Ser Glu Ile Leu Ile Ile Leu Gly 20 25 Phe Trp Ser Ser Pro Tyr Phe Gln Met Ser Ala Gln His Val Leu Ser Ser Thr Thr Glu Asn Pro Glu Glu Lys Gly Arg Cys Phe Pro 55 <210> 187 <211> 89 <212> PRT <213> Homo sapiens <400> 187 Arg Leu Thr Gln Gly Arg Trp Val Arg Lys Pro His Pro Ser Arg Ser 10 15 Arg Val Met Glu Lys Ile Pro Val Ser Ala Phe Leu Arg Leu Val 25 Ala Leu Ser Asn Leu Ala Arg Tyr Asp Ser Thr Val Lys Pro Gly 35 40 Lys Lys Arg Lys Glu Ser Arg Ala Lys Leu Arg Gln Asp Thr Leu 55 Ser Trp Gly Glu Gln Leu Ile Trp Arg Thr Gln Thr Tyr Glu Glu Ala 65 75 80 Leu Tyr Lys Ser Arg Leu Ala Thr Asn 85 <210> 188 <211> 72 <212> PRT <213> Homo sapiens <400> 188 Gly Asn Pro Glu Leu Pro Trp Arg Lys Phe Gln Cys Gln His Ser Cys 10 15 Ala Leu Trp Arg Ser Pro Thr Ile Trp Pro Gly Ile Ala Gln Ser Asn 20 25 30

Leu Glu Pro Lys Arg Thr Gly Arg Ser Leu Glu Pro Asn Cys Ala Arg 40 Ser Pro Glu Val Gly Val Asn Asn Ser Ser Gly Leu Arg Arg Met 50 55 60 Arg Asp Lys Leu Tyr Ile Asn <210> 189 <211> 125 <212> PRT <213> Homo sapiens <400> 189 Ser Leu Gly His Arg Pro Arg Asn Gly Gly His Ser Arg Gly Cys Asp Leu Gly Gly Leu His Ala His Ser Pro Asp Gln Pro Arg Leu Gly Ala 20 25 Gly Gln Gln Ala Leu Ala Lys Asn Ala Tyr Ser Val Ser Leu Pro Pro 35 40 45 Cys Val Trp Pro Gly Gly His Leu His Leu Arg Leu His His Arg Thr 50 55 60 Gly Arg Glu His Arg Ala His Thr Leu Leu Pro Leu Trp Asp Pro Leu 65 70 75 80 Leu Gly Ser Cys Leu Leu Leu Pro Ala Cys Gln Asp Ser Gln 90 95 Glu Ala Arg Pro Gly Glu Ala Pro Phe Pro Val Gly Gly Asp Ser Ser 100 Gly Arg Gly Leu Gln Pro Ser Pro Gly Cys Tyr Arg Tyr 115 120 125 <210> 190 <211> 200 <212> PRT <213> Homo sapiens <400> 190 Gly Arg Asp Ser Cys Pro Arg Ser Pro Pro Ala Leu Arg Ser Ser 10 Pro Ala Ala Leu Leu Arg Ala Gly Ser Ser Thr Lys Phe Thr Ala Asn 20 25 30 Ala Leu Ala Leu Gly Ser Met Thr Thr Arg Ala Val Pro Gly Asp Cys 35 40 45 Asn Gly Leu Lys Ser Lys Tyr Tyr Arg Leu Cys Asp Lys Ala Glu 50 55 60 Ala Gly Ile Val Leu Glu Thr Val Ala Thr Ala Gly Val Thr 65 70 75 80

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Ser Val Ala Phe Met Leu Thr Leu Pro Ile Leu Val Cys Lys Val Gln 85 90 95 Asp Ser Asn Arg Arg Lys Met Leu Pro Thr Gln Phe Leu Phe Leu 105 Gly Val Leu Gly Ile Phe Gly Leu Thr Phe Ala Gly Phe Ile Ile Leu 115 120 125 Gly Thr Gly Thr Asp Ser Pro Phe Arg Phe Phe Leu Gly Ile 135 140 Ser Ile Cys Phe Ser Cys Leu Leu Ala His Ala Val Ser Leu Thr 145 150 155 160 Leu Val Arg Gly Arg Lys Pro Leu Ser Gly Arg Leu Val Ile Leu Leu 165 170 175 Ala Val Gly Phe Ser Leu Val Gln Asp Val Ile Ala Ile Glu Tyr Ile 180 185 190 Val Leu Thr Met Asn Arg Thr Lys 195 200 <210> 191 <211> 111 <212> PRT <213> Homo sapiens <400> 191 Ala Glu Ala His Gly Gln Thr Gln Asn His Gln Pro Gly Lys Gly Leu 10 Pro Pro Pro Asp Glu Leu Gly Gln Thr Asp Ser Met Ser Gln Gln Ala 25 Gly Glu Ala Gly Asp Lys Glu Asp Pro Lys Glu Glu Glu Ala Cys Gly 35 40 Pro Cys Ala ProVal Gln Ser Asp Asp Glu Gly Glu Gly Glu Ala 50 55 Asp Ala Gln His Thr Gln Glu Glu Glu Lys Leu Ser Arg Gln Phe His 65 70 Ser Pro Val Gly Val Leu His Leu Ala Asp Glu Asp Arg Glu Ser 85 90 His Glu Gly His Arg Gly His Asn Pro Gly Cys Gly His Arg Phe 100 105 110 <210> 192 <211> 92 <212> PRT <213> Homo sapiens <400> 192 Glu Ile Tyr Glu Thr Asp Tyr Asn His Ser Gly Thr Ile Asp Trp Ala 5 10 15

His Glu Met Arg Thr Ala Leu Arg Lys Ala Gly Phe Thr Leu Asn Ser

20 25 30 Gln Val Gln Gln Thr Ile Ala Leu Arg Tyr Ala Cys Ser Lys Leu Gly 40 45 Ile Asn Phe Asp Ser Phe Val Ala Cys Met Ile Arg Leu Glu Thr Leu 50 55 60 Phe Lys Leu Phe Ser Leu Leu Asp Glu Asp Lys Asp Gly Met Val 65 75 80 Leu Ser Leu Ala Glu Trp Leu Cys Cys Val Leu Val 85 <210> 193 <211> 81 <212> PRT <213> Homo sapiens <400> 193 Glu Ser Leu Ile Ala Phe Leu Phe Leu His Asp Gln Cys Ala Gln Asp 5 Ser Ile Val Leu Thr Met Ile Lys Asp Val Val Arg Ile Gln Trp Thr 20 25 30 Glu Gly Arg Asn Cys Gly Leu Lys Glu Gln Arg Arg Gly Cys Pro Glu 40 Gly Glu Ser Leu Leu Asn Tyr Gln Ile Leu Gln Pro Glu Arg Leu 55 60 Phe His Arg Pro Gln Ser Ala Pro Phe His Cys Ser Arg His Glu Ile 65 70 75 80 Lys <210> 194 <211> 82 <212> PRT <213> Homo sapiens <400> 194 Lys Thr Thr Ile His Gly Pro Cys Gln Asn His Leu Pro Pro His 1 5 10 Phe Leu Lys Arg Pro Gly Thr Leu Ser Lys Gly Asp Pro Ile Asp 25 3.0 Ser Ser Gln Glu Gly Phe Arg Ala Ser Ile Arg Ala Pro Trp Val Leu 35 40 Leu Ser Pro Leu Glu Gln Gln Gly Phe Gln Gly Ser Gly Trp His 55 Glu Ser Leu Ser Leu Pro Ser Cys Ser Phe Met Thr Asn Val Pro Arg 65 70 75 80

<210> 195

Thr Gln

<212> PRT <213> Homo sapiens <400> 195 Arg Pro Pro Pro Ser Ser Arg Ser Ser Leu Ala Gly Gln Thr Asn Thr 10 15 Gln His Ser His Ser Ala Arg Glu 20 <210> 196 <211> 71 <212> PRT <213> Homo sapiens <400> 196 Thr Met Pro Ser Leu Ser Ser Ser Arg Arg Leu Asn Ser Leu Lys Arg 1 Val Ser Arg Ile Thr Arg Ile Gln Ala Lys Leu Ser Lys Leu Met Pro 20 25 30 Leu Ser Leu His Ala Tyr Arg Arg Ala Met Val Cys Cys Thr Trp Leu 35 40 45 Arg Val Lys Pro Ala Phe Leu Arg Ala Val Leu Ile Ser Trp Ala 55 60 Ser Met Val Pro Glu Trp Leu <210> 197 <211> 86 <212> PRT <213> Homo sapiens <400> 197 Ile Arg Arg Asn Thr Ser Arg Ile Ser Val His Thr Trp Arg Arg Thr 1 5 10 15 Pro Tyr Asp Ser Pro Ala Cys Phe Ser Cys Ser Ile Val Ser Leu 20 25 30 Gly Glu Gly Ser Phe Phe Ser Cys Val Ser Val Phe Phe Ser Phe Asp 35 40 Leu Ser Asn Phe Ser Ile Ser Ala Ile Ser Gly Leu Ser Asp 50 55 60 Ala Glu Glu Gln Ser Glu Ala His Glu Lys Tyr Glu Arg Gln Phe Leu 70 75 80 Ala Ser Arg Arg Ser Gly

<211> 25

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<sup>&</sup>lt;211> 101

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<400>	198														
His 1	Pro	Phe	Ser	Thr 5	Phe	Pro	Thr	Leu	Pro 10	Pro	Gln	Ala	Gly	Lys 15	Phe
Asp	Ala	Thr	Leu 20	Leu	Ala	Ser	Gln	Cys 25	Ile	Leu	Gly	Gly	Ala 30	Arg	Leu
Leu	Thr	Ile 35	Arg	Leu	Leu	Ala	Ser 40	Pro	Val	Gln	Ser	Phe 45	Leu	Trp	Lys
Ala	Val 50	Asp	Phe	Ser	Leu	Ala 55	Ser	Leu	Ser	Ser	Ser 60	Val	Ser	Thr	Tyr
Arg 65	Ile	Ser	Arg	Ser	Gln 70	Pro	Tyr	Arg	Val	Cys 75	Gln	Thr	Trp	Leu	Arg 80
Arg	Lys	Ser	Lys	Ala 85	Arg	Arg	Thr	Ser	Thr 90	Ser	Asp	Ser	Ser	Ser 95	Arg
Leu	Ala	Ala	Val 100	Ala											
<210><211><211><212><213>	100 PRT	sapie	ns												
<400>	199														
Thr 1	Pro	Phe	Pro	Pro 5	Ser	Gln	Leu	Tyr	Pro 10	Leu	Lys	Gln	Val	Asn 15	Ser
Thr	Gln	His	Phe 20	Ser	His	Leu	Ser	Ala 25	Tyr	Leu	Ala	Ala	His 30	Ala	Ser
Leu	Arg	Phe 35	Ala	Cys	Leu	Leu	Leu 40	Leu	Phe	Asn	Arg	Phe 45	Phe	Gly	Arg
Gln	Trp 50	Ile	Phe	Leu	Leu	Arg 55	Leu	Сув	Leu	Leu	Gln 60	Phe	Arg	Leu	Ile
Glu 65	Phe	Leu	Asp	Leu	Ser 70	His	Ile	Gly	Phe	Val 75	Arg	His	Gly	Cys	Gly 80
Gly	Lys	Ala	Lys	Arg 85	Gly	Ala	Arg	Val	Arg 90	Ala	Thr	Val	Pro	Arg 95	Val
Ser	Pro	Gln	Trp 100												
<210><211><212><213>	153 PRT	sapie	ns												
<400>	200														
Gly 1	Leu	Thr	Asp	Gln 5	Tyr	Leu	Glu	Leu	Asn 10	Ala	Leu	Gln	Glu	Glu 15	Leu
Gly	Pro	Phe	Gly	Leu	Val	Ile	Leu	Gly	Phe	Pro	Ser	Asn	Gln	Phe	Gly

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20 25 30 Lys Gln Glu Pro Gly Glu Asn Ser Glu Ile Leu Pro Ser Leu Lys 35 40 45 Gly Phe Val Arq Pro Gly Gly Pro Asn Phe Gln Leu Phe Glu Val 60 Glu Lys Glu Gln Lys Phe Gly Asp Val Asn Gly Tyr Thr Phe Leu 75 65 Thr Ala Glu Leu Leu Gly Ser Cys Pro Pro Ser Pro Gly Arg Leu Asn 90 Ile Asp Phe Phe Trp Glu Pro Met Lys His Ile Arg Trp Asn Glu Lvs 100 105 110 Phe Leu Val Gly Pro Asp Gly Ile Pro Val Met Arg Trp Tyr His 115 120 125 Ile Thr Thr Val Ser Asn Val Lys Met Asp Leu Ser Tyr Met Arg Arg 135 130 140 Gln Ala Ala Leu Ser Ala Arg Gly Lys <210> 201 <211> 249

<212> PRT

<213> Homo sapiens

<400> 201

Tyr Pro Tyr Pro Leu Pro Ile Met Gln Gly Leu Met Pro Pro Pro Pro 10 Arg Arg Gly Ser Ser Gly Arg Lys Pro His Ser Gln Ser Phe Tyr Pro Pro Arq Phe Ser Phe Leu Leu His Arg Gln Ala His Lys Trp His Asn 35 40 Val Trp Thr Cys Glu Pro Leu Arg Asp Asn Cys Pro Ser Val 50 55 60 Ile Cys Leu Leu Glu Met Ala Thr Gln Pro Arg Thr Gln Gly Trp Ser 65 70 75 80 Tyr Gly Leu Ala Gln His Pro His Ile Phe Phe Cys Val Ser Phe 90 Met Glu Thr Gln Val Leu Gly Leu Phe Gln Ser Pro Lys Pro Met Val 100 105 110 Lys Pro Glu His His Ser Trp Gly Gln His Leu Pro 120 His Thr Thr His His Gln Pro Pro Ser Phe Leu Ser Lys Asp Pro Pro 130 135 140 Glu Pro Pro Ser Glu Thr Ser Gln Asp Pro Ser His Ser Ala Pro Asn 145 150 155 160

Cys Glu Arg Asp Gly Arg Val Pro Gln Val Arg Gly Gly Val Ser Met 165 170 175 Lys Glu Gly Pro Glu Ala Leu Val Gly Gly Pro Pro Leu Ser Pro Ser 185 190 Val Pro Ala ·Val Leu Ser Ala Phe Arg Leu Arg Leu Pro Gly Arg Asp 195 200 205 Thr Thr GluPro Ala Pro Leu Asp Met Leu Ser Ser His Ser Val 210 215 220 Trp Tyr Leu Asn Thr Pro Ile Cys Pro Val Lys Val Phe Leu Gln 225 230 235 Lys Lys Lys Arg Lys Lys Lys Lys 245 <210> 202 <211> 156 <212> PRT <213> Homo sapiens <400> 202 Pro Pro Pro Ala Pro Leu Leu Cys Arg Ala Gln Ala Gly Leu Ser Ala 10 Ala Pro Leu Ala Leu Gly Pro Asn Phe Ser Tyr Arg Gly His Val Arg 25 30 Gly Ser Pro Ser Pro Gly Ala His Leu Pro Glu Ala Arg Cys Gly Gly 35 40 Gly Arg Pro Gly Arg Ser Gln Ala Gln Ser Gln Pro Ser Ser Gly 55 60 Gly Gly Arg Val Gly Arg Ser Gly Ser Lys Ala Arg Thr Pro Gln Leu 65 80 Phe Arg Leu Gln Gln Gln Leu Gln Arg Phe Gly His Gly Glu Val Cys Pro Arg Cys Trp Leu Gln Ala Gly Ala Arg Glu His Pro Gln Gly Gln 100 105 Gln Glu Ala Ser Glu Glu Gly Glu Gly Gln Glu Gly Glu Gly Gln 120 125 Glu Glu Gly Gly Ser Pro Leu Lys Gly Pro Gly Gln Gly Ser Leu Asn 130 135 140

<210> 203

145

<211> 113

<212> PRT

<213> Homo sapiens

Leu Pro Leu Cys

<400> 203

Asp Pro Thr Ser Leu Thr Ala Met Glu Phe Asp Leu Gly Ala Ala Leu

Pro Thr

Thr

Trp

155

Ser

Arg

150

Leu

Val

5 10 15 Pro Thr Ser Gln Lys Pro Gly Val Gly Ala Gly His Gly Gly Asp 25 Pro Lys Leu Ser Pro His Lys Val Gln Gly Arg Ser Glu Ala Gly Ala 45 Pro Gly Pro Lys Gly Gln Gly His His Ser Ser Ser Asp Ser Ser Ser 55 60 Ser Ser Ser Asp Ser Thr Asp Asp Val Lys Ser His Ala Gly Ala 70 80 Lys Gln His Glu Ser Ile Pro Gly Lys Ala Lys Lys Pro Lys Lys 90 Lys Glu Lys Gly Lys Lys Glu Lys Gly Lys Lys Glu Ala 100 105 110 His <210> 204 <211> 162 <212> PRT <213> Homo sapiens <400> 204 Gly Gly Pro Pro Ser Arg Trp Leu Val Pro Pro Lys His Leu Ser Leu 10 15 Val Gly Arg Glu Glu Gly Leu Met Ser Pro Val Gln Gly Pro Ser Val 30 Gly Ser Leu Leu Leu Leu Ala Leu Leu Leu Leu Ala Leu Leu Leu Leu 35 40 Leu His Phe Gly Leu Leu Gly Leu Ala Arg Asp Ala Leu Val Gly Ala Ser Ser Val Gly Leu His Ile Arg Val Arg Ile Ala Gly Ala 65 80 Ala Gly Val Gly Arg Ala Val Val Ser Leu Leu Trp Thr Thr Arg 85 Cys Cys Pro Leu Arg Pro Ala Leu Asn Val Gly Gly Phe Thr Glu Leu 100 105 Ser Pro Val Ala Arg Pro His Thr Gly Leu Leu Gly Gly Gly 115 120 125 Gln Gly Cys Ser Gln Val GluLeu His Gly Gly Lys Arg Ser Trp 130 135 140 Leu Arg Pro Arg Ala Pro Gly Pro Cys Arg Gly Ala Glu Gln Gly 145 150 155 160 Glu Arg

<210> 205

<211> 145

<212> PRT <213> Homo sapiens

<400> 205

Val	Glu	Pro	Trp	Thr 5	Thr	Cys	Arg	Ala	Ala 10	Gly	Ala	Val	Met	Ala 15	Asp
Tyr	Trp	Lys	Ser 20	Gln	Pro	Lys	Lys	Phe 25	Cys	Asp	Tyr	Cys	Lys 30	Cys	Trp
Ile	Ala	Asp 35	Asn	Arg	Pro	Ser	Val 40	Glu	Phe	His	Glu	Arg 45	Gly	Lys	Asn
His	Lys 50	Glu	Asn ,	Val	Ala	Lys 55	Arg	Ile	Ser	Glu	Ile 60	Lys	Gln	Lys	Ser
Leu 65	Asp	Lys	Ala	Lys	Glu 70	Glu	Glu	Lys	Ala	Ser 75	Lys	Glu	Phe	Ala	Ala 80
Met	Glu	Ala	Ala	Ala 85	Leu	Lys	Ala	Tyr	Gln 90	Glu	Asp	Leu	Lys	Arg 95	Leu
Gly	Leu	Glu	Ser 100	Glu	Ile	Leu	Glu	Pro 105	Ser	Ile	Thr	Pro	Val 110	Thr	Ser
Thr	Ile	Pro 115	Pro	Thr	Ser	Thr	Ser 120	Asn	Gln	Gln	Lys	Glu 125	Lys	Lys	Glu
Lys	Lys 130	Lys	Lys	Arg	Ser	Phe 135	Lys	Gly	Gln	Met	Gly 140	Arg	Arg	His	Asn
_															

Leu 145

<210> 206

<211> 262

<212> PRT <213> Homo sapiens

<400> 206

Pro 1	Ala	Leu	Ser	His 5	Leu	Pro	Arg	His	Gln 10	Ile	Asn	Arg	Lys	Lys 15	Arg
Lys	Arg	Arg	Arg 20	Lys	Lys	Asp	Pro	Ser 25	Lys	Gly	Arg	Trp	Val 30	Glu	Gly
Ile	Thr	Ser 35	Glu	Gly	Tyr	His	Tyr 40	Tyr	Tyr	Asp	Leu	Ile 45	Ser	Gly	Ala
Ser	Gln 50	Trp	Glu	Lys	Pro	Glu 55	Gly	Phe	Gln	Gly	Asp 60	Leu	Lys	Lys	Thr
Ala 65	Val	Lys	Thr	Val	Trp 70	Val	Glu	Gly	Leu	Ser 75	Glu	Asp	Gly	Phe	Thr 80
Tyr	Tyr	Tyr	Asn	Thr 85	Glu	Thr	Gly	Glu	Ser 90	Arg	Trp	Glu	Lys	Pro 95	Asp
Asp	Phe	Ile	Pro 100	His	Thr	Ser	Asp	Leu 105	Pro	Ser	Ser	Lys	Val 110	Asn	Glu

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Asn	. Ser	Leu 115	Gly	Thr	Leu	Asp	Glu 120	Ser	Lys	Ser	Ser	Asp 125	Ser	His	Ser
Asp	Ser 130	-	Gly	Glu	Gln	Glu 135	Ala	Glu	Glu	Gly	Gly 140	Val	Ser	Thr	Glu
Thr 145		Lys	Pro	Lys	Ile 150	Lys	Phe	Lys	Glu	Lys 155	Asn	Lys	Asn	Ser	Asp 160
Gly	Gly	Ser	Asp	Pro 165	Glu	Thr	Gln	Lys	Glu 170	Lys	Ser	Ile	Gln	Lys 175	Gln
Asn	Ser	Leu	Gly 180	Ser	Asn	Glu	Glu	Lys 185	Ser	Lys	Thr	Leu	Lys 190	Lys	Ser
Asn	Pro	Туг 195	Gly	Glu	Trp	Gln	Glu 200	Ile	Lys	Gln	Glu	Val 205	Glu	Ser	His
Glu	Glu 210	Val	Asp	Leu	Glu	Leu 215	Pro	Ser	Thr	Glu	Asn 220	Glu	Tyr	Val	Ser
Thr 225		Glu	Ala	Asp	Gly 230	Gly	Gly	Glu	Pro	Lys 235	Val	Val	Phe	Lys	Glu 240
Lys	Thr	Val	Thr	Ser 245	Leu	Gly	Val	Met	Ala 250	Asp	Gly	Val	Ala	Pro 255	Val
Phe	Lys	Lys	Arg 260	Arg	Thr										
<210>	207														
<211>															
<212>	PRT														
<213>	Homo	sapie	ns												
<400>	207														
Gly 1	Lys	Gly	Arg	Arg 5	Lys	Gly	Ile	Lys	Gly 10	Val	Cys	Cys	Asn	Gly 15	Gly
Ser	Cys	Pro	Glu 20	Ser	Ile	Pro	Arg	Gly 25	Phe	Glu	Lys	Thr	Trp 30	Leu	Arg
Val	Arg	Asn 35	Phe	Gly	Ala	Lys	His 40	Asn	Thr	Ser	Asn	Gln 45	His	Tyr	Pro
Thr	Tyr 50	Leu	Asp	Ile	Lys	Ser 55	Thr	Glu	Arg	Lys	Glu 60	Arg	Glu	Glu	Glu
Lys 65	-	Ile	Leu	Gln	Arg 70	Ala	Asp	Gly							
<210><211><211><212><213>	68 PRT	sapie	ns												
<400>	208					•									
Ile		Asn	Phe		Ala	Leu	Lys	Met		Met	Tyr	Gln	Leu	Gln	Lys
1 Leu	Met	Val	Ala	5 Glu	Asn	Pro	Lys	Trp	10 Tyr	Leu	Lys	Lys	Lys	15 Gln	Ser
							-	-	-		-	-	-		

20 25 30

Leu Leu Glu Leu Glu Leu Trp Gln Met Glu Trp Pro Gln Ser Ser Lys Arg
40 Glu Glu Leu Glu Asn Gly Lys Ile Leu Gly Lys Phe Lys Gly Asn Glu
50 55 60

Val Met Ile Gln 65

<210> 209

<400> 209

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<210> 210

<211> 194

<212> PRT

<213> Homo sapiens

<400> 210

Ser 1	Val	His	Cys	Phe 5	Arg	Glu	Asp	Lys	Met 10	Lys	Phe	Thr	Ile	Val 15	Phe
Ala	Gly	Leu	Leu 20	Gly	Val	Phe	Leu	Ala 25	Pro	Ala	Leu	Ala	Asn 30	Tyr	Asn
Ile	Asn	Val 35	Asn	Asp	Asp	Asn	Asn 40	Asn	Ala	Gly	Ser	Gly 45	Gln	Gln	Ser
Val	Ser 50	Val	Asn	Asn	Glu	His 55	Asn	Val	Ala	Asn	Val 60	Asp	Asn	Asn	Asn
Gly 65	Trp	Asp	Ser	Trp	Asn 70	Ser	Ile	Trp	Asp	Tyr 75	Gly	Asn	Gly	Phe	Ala 80
Ala	Thr	Arg	Leu	Phe 85	Gln	Lys	Lys	Thr	Cys 90	Ile	Val	His	Lys	Met 95	Asn
Lys	Glu	Val	Met 100	Pro	Ser	Ile	Gln	Ser 105	Leu	Asp	Ala	Leu	Val 110	Lys	Glu
Lys	Lys	Leu 115	Gln	Gly	Lys	Gly	Pro 120	Gly	Gly	Pro	Pro	Pro 125	Lys	Gly	Leu
Met	Tyr 130	Ser	Val	Asn	Pro	Asn 135	Lys	Val	Asp	Asp	Leu 140	Ser	Lys	Phe	Gly
Lys 145	Asn	Ile	Ala	Asn	Met 150	Cys	Arg	Gly	Ile	Pro 155	Thr	Tyr	Met	Ala	Glu 160
Glu	Met	Gln	Glu	Ala 165	Ser	Leu	Phe	Phe	Tyr 170	Ser	Gly	Thr	Cys	Tyr 175	Thr
Thr	Ser	Val	Leu 180	Trp	Ile	Val	Asp	Ile 185	Ser	Phe	Cys	Gly	Asp 190	Thr	Val

Glu Asn

<210> 211

<211> 82

<212> PRT

<213> Homo sapiens <400> 211 Val His Gln Ala Leu Gly Arg Trp Ser Ser Trp Ser Leu Thr Leu Lys 10 15 Leu Phe Asp Leu Leu Gln Cys Ile Lys Gly Leu Asn Gly Gly His Asp Phe Leu Val His Phe Val His Asn Ala Cys Leu Leu Leu Lys Glu Ser 35 40 Gly Cys Ser Lys Ala Ile Ser Ile Ile Asp Pro Gly Ile Pro Gly 50 55 Pro Ser Val Val Val Asn Ile Gly His Ile Ile Val Phe Ile Val Asp 70 75 80 Thr His <210> 212 <211> 119 <212> PRT <213> Homo sapiens <400> 212 Glu Leu Gly Leu Asn His Leu Trp Leu Arg Val Trp Leu Glu Pro Thr 10 15 Ala Gln Val Pro Asp Val Leu Phe Pro Glu Phe Met Glu Arg Glu Lys Ala Val Ser Leu Leu Leu Trp Phe Asn Val Glu Pro Lys Gln 35 40 Pro Pro Leu Pro Gly Arg GluAla Phe Gly Phe Leu Leu Leu Leu Leu 50 55 60 Val Leu Ala Gly Glu Val Leu Gln Asp His Arg Leu Ala Gln Leu 80 Ala Gly Val Leu Leu Arg Ala His Ala Gly Arg Leu Phe Arg Arg 90 Lys Ala Leu Thr Lys Ala Ser Ala Arg Cys Ala Pro Glu Gly 105 110 Ser Glu Ser Phe Ala Ser 115 <210> 213 <211> 136 <212> PRT <213> Homo sapiens

<400> 213

Ile Ile Cys Gly Cys Val Ser Gly Leu Ser Pro Leu His Arg Ser 1 10 15 Met Tyr Cys Phe Gln Ser Ser Trp Arg Gly Arg Lys Arg Leu Tyr Leu

20 25 30 Cys Cys Ser Gly Leu Met Ser Lys Ser Arg Ser Ser Leu Leu Cys Leu 35 40 45 Ala Glu Lys Pro Leu Ala Phe Phe Phe Phe Ser Leu Arg Leu Trp Arg Val Lys Thr Tyr Ser Arg Thr Ala Leu Arg Cys Ser Trp Ser Ser Arg 65 75 80 Ala Cys Gly Leu Met Arg Gly Val Cys Ala Ser Gly Arg Pro Ser Arg 90 95 Arg Pro Pro Arq Ala Val Leu Lys Leu Ala Gly His Arg Ser His Ser 100 105 Pro Leu Ser Glu. Thr Met His Gly Arg Ser His Ser Ser Phe Ser 115 120 125 Arg Phe Arg Arg Ser Leu Met Thr 130 135 <210> 214 <211> 101 <212> PRT <213> Homo sapiens <400> 214 Thr Leu Glu Thr Val His Gln Gly Pro Val Gln Trp Ala Gln Ala Arg 10 15 His Ala Ala Thr Asp Asp Ser Gly Gln Ala Gly Leu Lys Ser Arg Ser 20 Arg Gly Tyr Tyr Phe Ser Asp Lys Ile Gln Met Pro Leu Leu Gly Cys 35 40 Tyr Tyr Arg Asn Pro Ser Thr Gly Asn Lys Ala His Phe Gln Asn Tyr 50 His Gln Arg Arg Ser Tyr Pro Pro Glu Pro Gln Ala Lys Leu Val 65 70 80 Cys Gly Asn Arg His Trp Leu Tyr Phe Leu His Leu Arg Glu Gln Ile 85 90 Pro Ala Ser Val Lys 100 <210> 215 <211> 204 <212> PRT <213> Homo sapiens

<400> 215

Pro Ala Phe Arg Ser Thr Ala Gly Arg Gly Leu Arg Leu Arg Cys Glu 15 Gly Leu Pro Glu Ala Gln Thr Pro Arg Met Ser Pro Gln Ala Arg Glu 20 25 30

Asp	Gln	Leu 35	Gln	Arg	Lys	Ala	Val 40	Val	Leu	Glu	Tyr	Phe 45	Thr	Arg	His
Lys	Arg 50	Lys	Glu	Lys	Lys	Lys 55	Lys	Ala	Lys	Gly	Phe 60	Ser	Ala	Arg	Gln
Arg 65	Arg	Glu	Leu	Arg	Leu 70	Phe	Asp	Ile	Lys	Pro 75	Glu	Gln	Gln	Arg	Tyr 80
Ser	Leu	Phe	Leu	Pro 85	Leu	His	Glu	Leu	Trp 90	Lys	Gln	Tyr	Ile	Arg 95	Asp
Leu	Cys	Ser	Gly 100	Leu	Lys	Pro	Asp	Thr 105	Gln	Pro	Gln	Met	Ile 110	Gln	Ala
Lys	Leu	Leu 115	Lys	Ala	Asp	Leu	His 120	Gly	Ala	Ile	Ile	Ser 125	Val	Thr	Lys
Ser	Lys 130	Cys	Pro	Ser	Tyr	Val 135	Gly	Ile	Thr	Gly	Ile 140	Leu	Leu	Gln	Glu
Thr 145	Lys	His	Ile	Phe	Lys 150	Ile	Ile	Thr	Lys	Glu 155	Asp	Arg	Leu	Lys	Val 160
Ile	Pro	Lys	Leu	Asn 165	Cys	Val	Phe	Thr	Val 170	Glu	Thr	Asp	Gly	Phe 175	Ile
Ser	Tyr	Ile	Tyr 180	Gly	Ser	Lys	Phe	Gln 185	Leu	Arg	Ser	Ser	Glu 190	Arg	Ser
Ala	Lys	Lys 195	Phe	Lys	Ala	Lys	Gly 200	Thr	Ile	Asp	Leu				

<210> 216

<211> 645

<212> PRT

<213> Homo sapiens

<400> 216

Pro 1	Thr	Arg	Pro	Val 5	Ala	Ala	Gly	Ser	Glu 10	Gln	Gln	Gln	Gln	Ser 15	Ala
Phe	Ile	Gln	Glu 20	Arg	Gln	Pro	Val	Ala 25	Leu	Met	Arg	Leu	Leu 30	Ser	Phe
Asn	Val	Pro 35	His	Ile	Lys	Asn	Ser 40	Thr	Gly	Glu	Pro	Ile 45	Trp	Lys	Val
Leu	Ile 50	Tyr	Asp	Arg	Phe	Gly 55	Gln	Asp	Ile	Ile	Ser 60	Pro	Leu	Leu	Ser
Val 65	Lys	Glu	Leu	Arg	Asp 70	Met	Gly	Ile	Thr	Leu 75	His	Leu	Leu	Leu	His 80
Ser	Asp	Arg	Asp	Pro 85	Ile	Pro	Asp	Val	Pro 90	Ala	Val	Tyr	Phe	Val 95	Met
Pro	Thr	Glu	Glu 100	Asn	Ile	Asp	Arg	Met 105	Cys	Gln	Asp	Leu	Arg 110	Asn	Gln
Leu	Tyr	Glu	Ser	Tyr	Tyr	Leu	Asn	Phe	Ile	Ser	Ala	Ile	Ser	Arg	Ser

115 120 125 Lys Leu Glu Asp Ile Ala Asn Ala Ala Leu Ala Ala Ser Ala Val Thr 130 135 140 Gln Val Ala Val Phe Tyr Lys Asp Gln Leu Asn Phe Ile Thr Leu Glu 145 150 155 160 Phe Val Asp Met Leu Cys Gln Asn Asp Asn Lys Glu Leu Val Ser Tyr 165 170 175 Arg Ala Ile Asn Arg Pro Asp Ile Thr Asp Thr Glu Glu Thr Met Val 185 190 Thr Met Asp Ile Val Asp Ser Leu Phe Cys Phe Phe Val Thr Leu Gly 195 200 205 Val Ala Pro Ile Ile Cys Arg Ser Arg Gly Thr Ala Ala Glu Met Val 210 215 220 Ala Val Asp Glu Lys Leu Lys Lys Leu Arg Asn Leu Arg Asp Ala Arg 225 230 235 240 Asn Ser Leu Phe Thr Gly Asp Thr Leu Gly Ala Gly Gln Phe Ser Phe 245 250 255 Gln Arg Pro Leu Leu Val Leu Val Asp Arg Ile Asn Asp Leu Ala Thr 260 265 270 Pro His His Trp Tyr Leu Thr Thr Gln Ala Leu Val His Asp Val Leu 275 280 Asp Phe His Leu Asn Arg Val Asn Leu Glu Glu Ser Ser Gly Val 290 295 300 Asn Ser Pro Ala Gly Ala Arg Pro Lys Lys Arg Asn Ser Tyr Lys Lys 305 315 320 Asp Thr Pro Val Asp Lys Phe Gln Trp Lys His Ser Lvs Gly Pro 325 330 335 Phe Pro Glu Val Ala Glu Ser Gln Val Gln Glu Leu Glu Ser Tyr Arg 340 345 350 Ala Gln Glu Asp Glu Val Lys Arg Leu Lys Ser Ile Met Gly Leu Glu 355 360 365 Gly Glu Ile Asp Glu Gly Ala Ser Met Ser Asp Leu Asn Thr Ala Lys 370 375 380 Leu Ser Ala Val Ser Ser Leu Pro Glu Leu Leu Glu Lys Lys Arg 385 390 395 400 Leu Ile Asp Leu His Thr Asn Val Ala Thr Ala Val Leu Glu His Ile 405 410 415 Lys Ala Tyr Arg Lys Val Phe Leu Asp Glu Tyr Glu Glu Lys Ile Met 420 425 430 Thr Ser Lys Thr Ser Leu Asp Lys Ile Ile Leu Leu Asp Ser Asp Pro 435 440 445 Asp Asp Ala Gly Thr Pro Glu Arg Lys Met Leu Phe Leu Ile Tyr Tyr

	450					455					460				
Ile 465	Ser	Thr	Gln	Gln	Ala 470	Pro	Ser	Glu	Ala	Asp 475	Leu	Glu	Gln	Tyr	Lys 480
Lys	Ala	Leu	Thr	Asp 485	Ala	Gly	Cys	Asn	Leu 490	Asn	Pro	Leu	Gln	Tyr 495	Ile
Lys	Gln	Trp	Lys 500	Ala	Phe	Thr	Lys	Met 505	Ala	Ser	Ala	Pro	Ala 510	Ser	Tyr
Gly	Ser	Thr 515	Thr	Thr	Lys	Pro	Met 520	Gly	Leu	Leu	Ser	Arg 525	Val	Met	Asn
Thr	Gly 530	Ser	Gln	Phe	Val	Met 535	Glu	Gly	Val	Lys	Asn 540	Leu	Val	Leu	Lys
Gln 545	Gln	Asn	Leu	Pro	Val 550	Thr	Arg	Ile	Leu	Asp 555	Asn	Leu	Met	Glu	Met 560
Lys	Ser	Asn	Pro	Glu 565	Thr	Asp	Asp	Tyr	Arg 570	Tyr	Phe	Asp	Pro	Lys 575	Met
Leu	Arg	Gly	Asn 580	Asp	Ser	Ser	Val	Pro 585	Arg	Asn	Lys	Asn	Pro 590	Phe	Gln
Glu	Ala	Ile 595	Val	Phe	Val	Val	Gly 600	Gly	Gly	Asn	Tyr	Ile 605	Glu	Tyr	Gln
Asn	Leu 610	Val	Asp	Tyr	Ile	Lys 615	Gly	Lys	Gln	Gly	Lys 620	His	Ile	Leu	Tyr
Gly 625	Cys	Ser	Glu	Leu	Phe 630	Asn	Ala	Thr	Gln	Phe 635	Ile	Lys	Gln	Leu	Ser 640
Gln	Leu	Gly	Gln	Lys 645											
210> 2	217														

<210> 217 <211> 101 <212> PRT <213> Homo sapiens

<400> 217

Gly 1	Ala	Gly	Pro	Ser 5	Gln	Leu	Arg	Leu	His 10	Tyr	Pro	Arg	Ile	Ser 15	Met
Ala	Val	Arg	Gln 20	Trp	Val	Ile	Ala	Leu 25	Ala	Leu	Ala	Ala	Leu 30	Leu	Val
Val	Asp	Arg 35	Glu	Val	Pro	Val	Ala 40	Ala	Gly	Lys	Leu	Pro 45	Phe	Ser	Arg
Met	Pro 50	Ile	Cys	Glu	His	Met 55	Val	Glu	Ser	Pro	Thr 60	Cys	Ser	Gln	Met
Ser 65	Asn	Leu	Val	Cys	Gly 70	Thr	Asp	Gly	Leu	Thr 75	Tyr	Thr	Asn	Glu	Cys 80
Gln	Leu	Cys	Leu	Ala 85	Arg	Ile	Lys	Thr	Lys 90	Gln	Asp	Ile	Gln	Ile 95	Met

Lys Asp Gly Lys Cys

<210> 218

<211> 123

<212> PRT

<213> Homo sapiens

<400> 218

Gln Leu Gly Trp Phe Tyr Phe Met Ser Tyr Pro Leu His Ala Ile His 10 15 His Cys Ser Pro Ala Asp Thr Glu Val Leu Ser Trp Leu Leu 25 Gln His Leu Pro Ser Phe Met Ile Trp Met Ser Cys Leu Val Phe Ile 40 Arg Ala Lys Gln Ser Trp Ser His Phe Val Tyr Val Ser Pro Ser Val 50 55 Pro Gln Thr Arg Leu Ile Trp Glu Gln Asp Val Gly Asp Ser Thr Met 65 70 - 80 Ser Gln Met Gly Ile Leu Glu Lys Gly Ser Phe Pro Ala Ala Thr 85 Gly Thr Ser Leu Ser Thr Thr Arg Arg Ala Ala Lys Ala Arg Ala Ile 105 Trp Arg Thr Ala Met Leu Ile Leu Gly Thr His

<210> 219

<211> 64

<212> PRT

<213> Homo sapiens

115

<400> 219

Ile Lys Ala Lys Phe Asn Leu Asn Ala Phe Phe Phe Phe Phe Leu 15 Arg Ser Glu Ile Gly Thr Val Ile Leu Ser Thr Glu Arg Gln Thr 25 30 Lys Trp Ala Met Lys Gly Gly Gly Lys Val Leu Ser Ile Val Arg Gly 45 Pro Glu Ile Lys Pro Ile Tyr Lys His Val Cys Ser Ser Lys Ile Gln 50 55

<210> 220

<211> 67

<212> PRT

<213> Homo sapiens

<400> 220

Ser Phe Ala Ile Pro Phe Pro Trp His Cys Thr Ile Ser Pro Ile Ile 1 5 10 15 Gly Gln Ser Leu Gly Phe Leu Gly Phe Thr Met Val Ala Thr Thr Ile 20 25 30

Arg Leu Ile Asp Gly Ser Asn Leu Lys Lys Lys Val Met Val Met Asp 35 40 45

Lys Ile Ser Arg Ser Arg Glu Val Cys Tyr His Lys Ile Thr Val Ala 50 60

Ser Thr Ser

<210> 221

<211> 117

<212> PRT

<213> Homo sapiens

<400> 221

Thr Ile Ile Ser Ser Ile Thr Asp Ser Gln Leu Gln Glu Val Ala Glu 1 5 10 15

Gln Leu Glu Ile Phe Ala Ala Leu His Glu Val Leu His Ile Ile Asn 20 25 30

Asp Arg Lys Asn Leu Lys Gly Gly Leu Gln Glu Val Ala Glu Gln Leu 35 40

Glu Leu Glu Arg Ile Gly Pro Gln His Gln Ala Gly Ser Asp Ser Leu 50 55 60

Leu Thr Gly Met Ala Phe Phe Lys Met Arg Glu Met Phe Phe Glu Asp
65 70 75 80

His Ile Asp Asp Ala Lys Tyr Cys Gly His Leu Tyr Gly Leu Gly Ser 85 90 95

Gly Ser Ser Tyr Val Gln Asn Gly Thr Gly Asn Ala Tyr Glu Glu Glu 100 105 110

Ala Asn Lys Gln Ser

<210> 222

<211> 196

<212> PRT

<213> Homo sapiens

<400> 222

Pro Thr Cys Pro Ile Gln His Phe Ile Met Met Lys Leu Trp Val Pro 1 5 10

Ser Arg Ser Leu Pro Asn Ser Pro Asn His Tyr Arg Ser Phe Leu Ser 20 25 30

His Thr Leu His Ile Arg Tyr Asn Asn Ser Leu Phe Ile Ser Asn Thr 35 40 45

His Leu Ser Arg Arg Lys Leu Arg Val Thr Asn Pro Ile Tyr Thr Arg 50 55 60

Lys Arg Ser Leu Asn Ile Phe Tyr Leu Leu Ile Pro Ser Cys Arg Thr

65 70 75 80 Arg Leu Ile Leu Trp Ile Ile Tyr Ile Tyr Arg Asn Leu Lys His Ser Thr Ser Thr Val Arg Ser His Ser His Ser Ile Tyr Arg Leu 100 105 110 Arg Pro Ser Met Arg Thr Asn Ile Ile Leu Cys His Ser Tyr Tyr 115 120 125 Pro Pro Ile Ser Ile His Pro Tyr Trp Asn Asn Pro Ser Arg Met Asn 130 135 140 Leu Arg Gly Leu Arg Gln Ser His Leu Ser Leu Asp Pro Ile Leu Arq 145 150 155 160 Phe Pro Leu His Leu Thr Ile Tyr Tyr Arg Gly Pro Ser Asn Arg Ser 165 170 175 Pro Pro Arg Asn Arg Ile Lys Gln Pro Asn Arg Ile Lys 180 185 190 Leu Arg Cys Arg 195

<210> 223

<211> 174

<212> PRT

<213> Homo sapiens

<400> 223

Leu 1	Pro	Ser	Ala	Ile 5	Glu	Gly	Pro	Thr	Pro 10	Val	Ser	Ala	Leu	Leu 15	His
Ser	Ser	Thr	Ile 20	Val	Val	Ala	Gly	`Ile 25	Phe	Leu	Leu	Val	Arg 30	Phe	His
Pro	Leu	Thr 35	Thr	Asn	Asn	Asn	Phe 40	Ile	Leu	Thr	Thr	Ile 45	Leu	Сув	Leu
Gly	Ala 50	Leu	Thr	Thr	Leu	Phe 55	Thr	Ala	Ile	Cys	Ala 60	Leu	Thr	Gln	Asn
Asp 65	Ile	Lys	Lys	Ile	Ile 70	Ala	Phe	Ser	Thr	Ser 75	Ser	Gln	Leu	Gly	Leu 80
Ile	Ile	Val	Thr	Leu 85	Gly	Ile	Asn	Gln	Pro 90	His	Leu	Ala	Phe	Leu 95	His
Ile	Cys	Thr	His 100	Ala	Phe	Phe	Lys	Ala 105	Ile	Leu	Phe	, Ile	Cys 110	Ser	Gly
Ser	Ile	Ile 115	His	Ser	Leu	Ala	Asp 120	Glu	Gln	Asp	Ile	Arg 125	Lys	Ile	Gly
Asn	Ile 130	Thr	Lys	Ile	Ile	Pro 135	Phe	Thr	Ser	Ser	Cys 140	Leu	Val	Ile	Gly
Ser 145	Leu	Ala	Leu	Thr	Gly 150	Ile	Pro	Phe	Leu	Thr 155	Gly	Phe	Tyr	Ser	Lys 160

Asp Leu Ile Ile Glu Ala Ile Asn Thr Cys Asn Thr Asn Ala 165 170 <210> 224 <211> 123 <212> PRT <213> Homo sapiens <400> 224 Phe Leu Lys Thr Thr Ala Leu Ile Ile Ser Val Leu Gly Phe Leu Tle 10 Glu Ala Leu Leu Asn Asn Leu Thr Ile Lys Leu Ser Ile Asn Lys Ala 20 25 30 Pro Tyr Ser Phe Thr Asn Ser Ser Leu Leu Gly Phe Phe Pro Ser Ile 35 40 45 His Ile Asn Ile Arg Ile Thr Pro Lys Ser Leu Leu Ser Leu Lys Thr 55 60 Ser Thr Leu Leu Asp Leu Ile Trp Leu Glu Lys Thr Ile Pro Lvs 65 70 80 Ser Thr Ser Thr Leu His Thr Ile Thr Thr Asn Leu Thr Thr Asn Gln 85 90 Gly Ile Ser Lys Leu Ile Lys Tyr Phe Leu Phe Leu Ile Asn Ile Ile 100 105 110 Leu Ile Ile Ile Leu Tyr Ser Ile Asn Leu Glu 115 120 <210> 225 <211> 129 <212> PRT <213> Homo sapiens <400> 225 Met Leu Leu Ala Glu Val Arg Ile Ser Met Val Ile Arg Asn Asn Ser 1 10 15 Tyr Leu Met Asn Arg Leu Met Phe Gly Ser Glu Cys Ile Tyr 25 30 His Glu Glu Asn Cys Ile Ile Asp His Val Thr Lys Arq Ala Thr Asp 35 40 45 Val Asn Arg Ile Glu Lys Lys Ser Val Leu Lys Leu Ile Leu 55 Ile Glu Thr Phe Met Val Gln Cys Gln Val Val Ile Ile Tyr Ser Ile 65 70 75 80 Leu Leu Trp Lys Asn Ile Arg Gly Lys Asn Arg Leu Ile Lys Glu Met 90 Asn Leu Ile Asp Val Val Val Ser Gly Tyr Lys Leu Met Cys Leu Ile 100 105 110

Arg Phe Asp Ile Glu Ile Arg Ile Gly Asp Ser Arg Arg Met Lys

125

115

Lys <210> 226 <211> 83 <212> PRT <213> Homo sapiens <400> 226 Phe Phe Phe Phe Phe Phe Ala Ile Gln Met Asn Val Tyr Phe Leu 10 Asn Pro His Arg Val Arg Ala Glu Leu Arg Asp Ala Trp His Ser Ile 20 25 30 His Pro Gly Ser Pro Leu Arg Ser Phe Phe Phe Ala Gly Ser Ile 45 Leu Asp Leu Tyr Gln His Phe Leu Arg Gln Tyr Pro Glu Trp Gln Ser 55 Gln Val Val Gly Val Phe Ser Tyr Phe Lys Gly Ser Arg Gly Asp Trp 75 80 Ile Pro Ser <210> 227 <211> 122 <212> PRT <213> Homo sapiens <400> 227 Ser Met Met Leu Phe Lys Val Leu Val Ile Thr Val Phe Cys Gly Leu 1 5 10 15 Val Ala Phe Pro Leu Ser Glu Leu Val Ser Ile Asn Lys 25 30 Asn Ser Ile Ile Asp Leu Leu Asn Ser Val Phe Asp Gln Leu Gly 35 40 Gly Ser Tyr Arg Thr Lys Ala Pro Leu Glu Asp Tyr Thr Asp Asp 55 Leu Ser Thr Glu Asp Ser Gln Ile Met Asp Phe Thr Pro Ala Ala Asn 65 70 80

100 105 Leu Ala Gly Asn Pro Val Ser Pro Thr Ser

Phe

Thr

Ser

Glu

Thr

Asn

120

Val

Asp

90

Asp

Thr

Glu

Thr

Ile Thr Val Lys

Val

Ile

110

Pro

Glu

Phe

85

<210> 228

Lys

Phe

<211> 62

<212> PRT

<213> Homo sapiens

Leu

Gln Asn

Glu

115

Ser

Glu

<400> 228

Thr 1	Ser	Thr	Thr	Val 5	Phe	Phe	Phe	Pro	Phe 10	His	Leu	Ser	Leu	Pro 15	Val
Gly	Cys	Thr	Val 20	Cys	Ser	His	Ala	Leu 25	Cys	Ile	Asn	Ile	Leu 30	Glu	Ile
Tyr	Arg	Ser 35	Val	Leu	Tyr	Phe	Leu 40	Tyr	Cys	Trp	Ile	Leu 45	Ile	Ile	Lys
Thr	Phe 50	Thr	Arg	Val	Leu	Asn 55	Lys	Ser	Ser	Leu	Thr 60	Arg	Lys		

<210> 229

<211> 99

<212> PRT

<213> Homo sapiens

<400> 229

Ala 1	Arg	Pro	Cys	Met 5	Asn	Ser	Thr	Lys	Ala 10	Leu	Pro	His	Gly	Arg 15	Glu
His	Thr	Arg	Leu 20	Lys	Met	Leu	Ser	Tyr 25	Leu	Lys	Asn	Lys	Met 30	Cys	Lys
Ser	Ser	Gly 35	Trp	His	Lys	Thr	Lys 40	Val	Asn	Ala	Ser	Trp 45	Gly	Thr	Phe
Leu	Arg 50	Gly	Leu	Ala	Glu	Cys 55	Val	Asn	Ile	Ile	Asp 60	Phe	Cys	Leu	Cys
Tyr 65	Met	Thr	Ser	Val	Thr 70	Ser	Leu	Lys	Ile	Cys 75	Thr	Ile	Gln	Phe	Gln 80
Leu	Trp	Ile	Thr	Ser 85	Val	Asp	Leu	Cys	Glu 90	Gly	Phe	Tyr	Leu	Cys 95	Arg

Met Gly Val

<210> 230

<211> 63

<212> PRT

<213> Homo sapiens

<400> 230

Gly 1	Glu	Leu	Gln	Lys 5	Ser	Ser	His	Tyr	His 10	Pro	Pro	Glu	Leu	Phe 15	Glu
Met	Ile	Phe	Phe 20	Val	His	Phe	Gly	Cys 25		Ile	Gly	Gly	Arg 30	Ile	Tyr
Tyr	Asn	Met 35	Asp	His	Leu	Tyr	Phe 40	Cys	Ile	Tyr	Leu	Phe 45	Ile	Thr	Arg
Pro	Gln 50	Pro	Gln	Ser	Ser	Phe 55	Ser	Pro	Ser	Thr	Ser 60	Leu	Cys	Leu	

<210> 231

<211> 64

<212> PRT <213> Homo sapiens

<400> 231

				Arg 5							Tyr				Tyr
His	Gln	Tyr	Cys 20	Ser	Gln	Asn	Val	Gln 25	Lys	Lys	Ser	Phe	Gln 30	Ile	Thr
				Asn											Cys

Gly Arg Ala Asn Ser Thr His Cys Ile Val Cys Ala Tyr Gly Gly Leu
50 55 60

<210> 232

<211> 88

<212> PRT

<213> Homo sapiens

<400> 232

Pro 1	Leu	Phe	Cys	Ala 5	Ile	Leu	Lys	Thr	Cys 10	Thr	Phe	Tyr	Phe	Ser 15	Asp
Ser	Leu	Thr	Phe 20	Leu	Ile	Glu	Cys	Val 25	Leu	Tyr	His	Ala	Val 30	Met	Leu
Trp	Tyr	Tyr 35	Ser	Tyr	Arg	Val	Leu 40	Pro	Ile	Leu	Lys	Thr 45	Cys	His	Phe
Pro	Lys 50	Arg	Ser	Phe	Asp	Ser 55	Ala	Leu	Glu	Val	Leu 60	His	Lys	Leu	Lys
Ser 65	Leu	Ser	Asn	Ile	Asn 70	Met	Lys	Gly	Gly	Thr 75	Gly	Cys	Asn	Ile	Tyr 80
Ser	Gln	Val	Thr	Ser 85	Leu	Tyr	Ile								

<210> 233

<211> 161

<212> PRT

<213> Homo sapiens

<400> 233

Ala 1	Ser	Thr	Ile	Met 5	Asp	Leu	Leu	Phe	Gly 10	Arg	Arg	Lys	Thr	Pro 15	Glu
Glu	Leu	Leu	Arg 20	Gln	Asn	Gln	Arg	Ala 25	Leu	Asn	Arg	Ala	Met 30	Arg	Glu
Leu	Asp	Arg 35	Glu	Arg	Gln	Lys	Leu 40	Glu	Thr	Gln	Glu	Lys 45	Lys	Ile	Ile
Ala	Asp 50	Ile	Lys	Lys	Met	Ala 55	Lys	Gln	Gly	Gln	Met 60	Asp	Ala	Val	Arg
Ile 65	Met	Ala	Lys	Asp	Leu 70	Val	Arg	Thr	Arg	Arg 75	Tyr	Val	Arg	Lys	Phe 80

Val	Leu	Met	Arg	Ala 85	Asn	Ile	Gln	Ala	Val 90	Ser	Leu	Lys	Ile	Gln 95	Thr
Leu	Lys	Ser	Asn 100	Asn	Ser	Met	Ala	Gln 105	Ala	Met	Lys	Gly	Val 110	Thr	Lys
Ala	Met	Gly 115	Thr	Met	Asn	Arg	Gln 120	Leu	Lys	Leu	Pro	Gln 125	Ile	Gln	Lys
Ile	Met 130	Met	Glu	Phe	Glu	Arg 135	Gln	Ala	Glu	Ile	Met 140	Asp	Met	Lys	Glu
Glu 145	Arg	Ile	Glu	Leu	Leu 150	His	Leu	Met	Ile	Pro 155	Trp	Val	Leu	Gly	Lys 160
Phe															
<210><211><212><213>	120 PRT	sapie	ens												
<400>		Sapic	.115									•			
Arg 1	Arg	Val	Arg	Thr 5	Lys	Ser	Phe	Ala	Met 10	Met	Arg	Thr	Ala	Ser 15	Ile
Trp	Pro	Cys	Leu 20	Ala	Ile	Phe	Leu	Met 25	Ser	Ala	Met	Ile	Phe 30	Phe	Ser
Trp	Val	Ser 35	Ser	Phe	Cys	Arg	Ser 40	Arg	Ser	Ser	Ser	Arg 45	Met	Ala	Arg
Phe	Arg 50	Ala	Leu	Trp	Phe	Cys 55	Arg	Ser	Ser	Ser	Ser 60	Gly	Val	Phe	Arg
Arg 65	Pro	Asn	Asn	Arg	Ser 70	Met	Met	Val	Glu	Ala 75	His	Trp	Gln	Ala	Gly 80
Ala	Gly	Thr	Asp	Thr 85	Arg	Phe	Arg	Phe	Arg 90	Val	Thr	Leu	Leu	Phe 95	Leu
Gly	Ser	Pro	Thr 100	Cys	Pro	Pro	Thr	Lys 105	Ala	Pro	Arg	Ser	Cys 110	Arg	Arg
Arg	Arg	Arg 115	Phe	Arg	Gly	Arg	Val 120								
<210><211><212><213>	121 PRT	1													
<400>	235														
Lys 1	Leu	Pro	Gln	Asn 5	Pro	Arg	Asp	His	Gln 10	Met	Gln	Gln	Phe	Asn 15	Pro
Leu	Leu	Leu	His 20	Ile	His	Asp	Leu	Cys 25	Leu	Pro	Leu	Lys	Leu 30	His	His
Asp	Leu	Leu	Asp	Leu	Gly	Gln	Leu	Gln	Leu	Ser	Val	His	Gly	Ala	His

		3 5					40					45			
Gly	Leu 50	Gly	Asp	Thr	Leu	His 55	Gly	Leu	Cys	His	Arg 60	Val	Val	Gly	Leu
Glu 65	Cys	Leu	Asp	Leu	Glu 70	Gly	His	Ser	Leu	Asp 75	Val	Gly	Pro	His	Gln 80
Tyr	Lys	Leu	Ala	His 85	Ile	Ala	Pro	Gly	Ala 90	His	Gln	Val	Phe	Cys 95	His
Asp	Ala	Asn	Ser 100	Ile	His	Leu	Ala	Leu 105	Leu	Gly	His	Leu	Leu 110	Asn	Val
Cys	Asn	Asp 115	Phe	Leu	Leu	Leu	Gly 120	Leu							
<210><211><211><212><213>	180 PRT	sapie	ns						٠						
<400>	236														
Lys 1	Thr	Lys	Arg	Ser 5	Val	Lys	Asp	Ala	Ala 10	Lys	Lys	Gly	Gln	Lys 15	Asp
Val	Cys	Ile	Val 20	Leu	Ala	Lys	Glu	Met 25	Ile	Arg	Ser	Arg	Lys 30	Ala	Val
Ser	Lys	Leu 35	Tyr	Ala	Ser	Lys	Ala 40	His	Met	Asn	Ser	Val 45	Leu	Met	Gly
Met	Lys 50	Asn	Gln	Leu	Ala	Val 55	Leu	Arg	Val	Ala	Gly 60	Ser	Leu	Gln	Lys
Ser 65	Thr	Glu	Val	Met	Lys 70	Ala	Met	Gln	Ser	Leu 75	Val	Lys	Ile	Pro	Glu 80
Ile	Gln	Ala	Thr	Met 85	Arg	Glu	Leu	Ser	Lys 90	Glu	Met	Met	Lys	Ala 95	Gly
Ile	Ile	Glu	Glu 100	Met	Leu	Glu	Asp	Thr 105	Phe	Glu	Ser	Met	Asp 110	Asp	Gln
Glu	Glu	Met 115	Glu	Glu	Glu	Ala	Glu 120	Met	Glu	Ile	Asp	Arg 125	Ile	Leu	Phe
Glu	Ile 130	Thr	Ala	Gly	Ala	Leu 135	Gly	Lys	Ala	Pro	Ser 140	Lys	Val	Thr	Asp
Ala 145	Leu	Pro	Glu	Pro	Glu 150	Pro	Pro	Gly	Ala	Met 155	Ala	Ala	Ser	Glu	Asp 160
Glu	Gly	Glu	Glu	Glu 165	Glu	Ala	Leu	Glu	Ala 170	Met	Gln	Ser	Arg	Leu 175	Ala
Thr	Leu	Arg	Ser 180												
<210> 237 <211> 111 <212> PRT															

<213> Homo sapiens

<400> 237

Leu 1	Met	Pro	Phe	Gln 5	Ser	Gln	Asn	Leu	Gln 10	Glu	Arg	Trp	Leu	Pro 15	Gln
Arg	Met	Arg	Gly 20	Arg	Arg	Lys	Arg	Leu 25	Trp	Arg	Pro	Cys	Ser 30	Pro	Gly
Trp	Pro	His 35	Ser	Ala	Ala	Arg	Gly 40	Cys	Leu	Pro	Arg	Trp 45	Val	Cys	Thr
His	Ser 50	Ser	Gln	Glu	Leu	Pro 55	Phe	Tyr	Val	Ser	Leu 60	Ala	Leu	His	Leu
Cys 65	Cys	Glu	Asp	Tyr	His 70	Phe	Gly	Glu	Gly	Ser 75	Val	Cys	Leu	Phe	Ser 80
Phe	Ser	Ala	Gln	Val 85	Leu	Gly	Ser	Gln	Arg 90	Asp	Cys	Ser	Tyr	Lys 95	Ser
Gly	Ile	Asn	Lys 100	Cys	Ile	Ile	Phe	Arg 105	Lys	Lys	Lys	Lys	Lys 110	Lys	

<210> 238

<211> 103 <212> PRT

<213> Homo sapiens

<400> 238

Lys 1	Ile	Cys	Glu	Arg 5	Cys	Cys	Gln	Glu	Gly 10	Pro	Glu	Gly	Cys	Leu 15	His
Ser	Ser	Gly	Gln 20	Gly	Asp	Asp	Gln	Val 25	Lys	Glu	Gly	Cys	Glu 30	Gln	Ala
Val	Cys	Ile 35	Gln	Ser	Thr	His	Glu 40	Leu	Ser	Ala	His	Gly 45	Asp	Glu	Glu
Pro	Ala 50	Arg	Gly	Leu	Ala	Ser 55	Gly	Trp	Phe	Pro	Ala 60	Glu	Glu	His	Arg
Ser 65	Asp	Glu	Gly	His	Ala 70	Lys	Ser	Cys	Glu	Asp 75	Ser	Arg	Asp	Ser	Gly 80
His	His	Glu	Gly	Val 85	Val	Gln	Arg	Asn	Asp 90	Glu	Gly	Trp	Asp	His 95	Arg
Gly	Asp	Val	Arq	Gly	His	Phe									

<210> 239

<211> 351 <212> PRT

<213> Homo sapiens

100

<400> 239

Thr Trp Cys Thr Thr Met Leu Ala Ala Arg Leu Val Cys Leu Arg 1 5 10

Pro Ser Arg Thr Leu Val Phe His Pro Ala Phe Thr Lys Ala Ser Pro 25 3.0 Val Val Lys Asn Ser Ile Thr Lys Asn Gln Trp Leu Leu Thr Pro Ser 35 Glu Arg Tyr Ala Thr Lys Thr Arg Ile Gly Ile Arg Arg Arg Gly Thr 50 Gln Gly Glu Leu Lys Glu Ala Ala Glu Leu Pro Ser Met Glu Lys 65 70 75 80 Phe Lys Ile Met Asp Gln Arg Trp Gly Phe Val Ala Gly Gly Ala Ala 85 95 Val Gly Leu Gly Ala Leu Cys Tyr Tyr Gly Leu Gly Leu Ser Asn Glu 100 105 110 Gly Ala Ile Ile Glu Lys Ala Val Ile Trp Pro Gln Tyr Val Lys Asp 115 120 125 Arg Ile His Ser Thr Tyr Met Tyr Leu Ala Gly Ser Ile Gly Leu Thr 130 135 140 Ala Leu Ser Ala Ile Ala Ile Ser Arg Thr Pro Val Leu Met Asn Phe 145 150 155 160 Met Met Arg Gly Ser Trp Val Thr Ile Gly Val Thr Phe Ala Ala Met 165 170 175 Val Gly Ala Gly Met Leu Val Ser Arg Ile Pro Tyr Gln Asp Ser Pro 180 185 190 Gly Pro Lys His Leu Ala Trp Leu Leu His Ser Gly Val Met Gly Ala 195 200 205 Val Val Ala Pro Leu Thr Ile Leu Gly Gly Pro Leu Leu Ile Arg 210 215 220 Ala Trp Tyr Thr Gly Ala Ile Val Gly Gly Leu Ser Thr Val Ala Met 225 230 235 240 Cys Ala Pro Ser Glu Lys Phe Leu Met Gly Asn Ala Pro Leu Gly Val 250 255 Gly Leu Gly Leu Val Phe Val Ser Ser Leu Gly Ser Met Phe Leu Pro 260 265 270 Pro Thr Thr Val Ala Gly Ala Thr Leu Tyr Ser Val Ala Met Tyr 275 280 285 Gly Leu Val Leu Phe Ser Met Phe Leu Leu Tyr Asp Thr Gln Lys Val 290 295 300 Ile Val Lys Arg Ala Glu Ser Val Pro Met Tyr Gly Gln Lys Tyr Asp 305 310 315 320 Pro Ile Asn Ser Met Leu Ser Ile Tyr Met Asp Thr Leu Ile Asn Phe 325 330 335 Met Arg Val Ala Thr Met Leu Ala Thr Gly Gly Asn Arg Lys 340 345 350

Asp

Val

Lys

65

Ser

Ile

Cys

Phe

Val

Glu

Phe

Glu

85

Ala

Asn

70

Gly

Val

Glu

Glu

Tyr

His

Thr Val Leu Lys Tyr Lys Cys His Thr Met Lys Lys Leu Ser

Glu

Ala

90

Asp

Asp

75

Thr

Thr

Leu

Glu

Gly

Gly

Thr

Asn

95

Cys

Asn

<210> 240 <211> 147 <212> PRT <213> Homo sapiens <400> 240 Arg Val Ala Pro Ala Thr Val Val Gly Gly Arg Asn Ile Asp Pro Asn 10 Glu Asp Thr Lys Thr Pro Thr Arg Pro Arg Pro Arg Gly Ala Pro Met 20 25 30 Phe Arg Asn Phe Ser Leu Gly Ala His Met Ala Thr Val Glu Arg Pro 35 40 Gly Pro Thr Pro Ala Val Tyr His Ala Ala Leu Met Arg Arg Pro 55 Asn Ala Pro Ile Val Arg Gly Thr Thr Ala Ile Pro Thr Pro Cys 65 75 80 Ser Cys Phe Gly Asn Gln Ala Arg Gly Pro Leu Trp Ser Tyr Gly Ile 85 90 95 Asp Arq Thr Ser Ile Pro Ala Pro Thr Met Ala Ala Thr Lys Val Pro 100 105 110 Val Thr Gln Ile Glu Pro Leu Ile Met Lys Phe Met Arg Thr Gly Val 115 120 125 Leu Leu Ile Ala Met Ala Asp Lys Ala Val Lys Pro Ile Leu Pro Ala 130 135 140 Tyr Ile Lys 145 <210> 241 <211> 196 <212> PRT <213> Homo sapiens <400> 241 Gly Thr Met Ala Ala Ala Asp Glu Arg Lys Ala Arg Arg Arg 10 Pro Glu Gly Glu Glu Asp Asp Glu Glu Glu Glu Gln Leu Val Leu Val 20 30 Glu Leu Ser Gly Ile Ile Asp Ser qaA Phe Ser Leu Lys Cys Glu Asn 40 Gly Lys Cys Lys Val Ile Leu Asp Thr Glu Arq Pro Ile Leu Gln Val 50

100 105 110 Thr Leu Leu Thr Glu Lys Lys Glu Gly Glu Glu Asn Ile Gly 115 120 125 Glu Gln Ile Phe Gly Val Trp Leu Lys Asp Asn Asp Ser Tyr Arg Pro 130 135 140 Met Ile Cys Asn Phe Leu His Glu Asn Glu Asp Glu Glu Val Val 155 145 150 160 Pro Glu Glu Glu Ala Ala Asp Lys Ser Leu Leu Glu Glu Ile Gln Ser 170 165 Phe Val Glu Pro Phe Pro Gly Gly Glu Pro Met Asn His Arg Lys Ile 185 180 190 Ala Pro Trp Glu 195 <210> 242 <211> 156 <212> PRT <213> Homo sapiens <400> 242 Pro Pro Ala Pro Ala Leu Arg His Arg Glu Thr Arg Arg Pro Val Ala 1 5 10 15 Thr Gly Gly Ala Arg His Val Gly Ala Leu Ser His 20 25 30 Arg Phe Ala Gly Ser His Leu Glu Trp Gln Lys Gln Phe Ala Arg 35 40 45 Gly Ala Gly Gln Glu Pro Asn 'Lys Leu Leu Arg Asp Leu Gly Ala Glu 55 60 Gly Ala Gly Gly Ser Ala Arg Thr Gln Asp Arg Trp Pro Val Thr Ara 65 75 80 Gly Ala Ala Gly Pro Trp Arg Arg Arg Arg Thr Ser Gly 90 Glu Gln Thr Lys Thr Arg Arg Arg Ser Phe Trp Arg Lys Ser Trp Trp 100 105 110 Gln Gln Tyr Glu Ile Thr Ser Gln Asn Asn Leu Leu Ser Val Lys Ile 115 120 125 Trp Gly Asn Ala Arq Phe Ala Leu Thr Leu Arg Pro Phe Cys Lys Trp 130 135 140 Thr Leu Gly Ser Met Thr Ala Val Ser Leu Lys Leu 145 150 155

<sup>&</sup>lt;210> 243

<sup>&</sup>lt;211> 132

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

Arg Arg Leu Glu Val Ser Tyr Arg Gln His His Phe Arg Val Ser Leu 10 Ser Ala Pro Trp Lys Met Ala Glu Ala Thr Asp Arg Arg Val Val Ser 25 30 Glu Ile Pro Val Gly Leu Lys Thr Asn Ala Pro Arg Asp Arg Glu 40 Trp Val Gln Arg Leu Lys Glu Glu Tyr Gln Ser Leu Ile Arg Tyr Val 50 55 60 Glu Asn Ala Asn Lys Asn Asp Asn Asp Trp Phe Arq Leu Glu Ser Asn 65 70 75 80 Glu Gly Trp Gly Lys Thr Arg Phe Lys Cys Trp Tyr Ile His Asp Leu 85 90 95 Tyr Glu Phe Phe Leu Lys Asp Ile Glu Asp Ile Pro Ile Thr Tyr Pro 100 105 110 Thr Thr Ala Pro Glu Ile Ala Val Pro Glu Leu Asp Gly Lys Thr Ala 115 120 Lys Met Tyr Arg 130 <210> 244 <211> 159 <212> PRT <213> Homo sapiens <400> 244 Tyr Ser Val Leu Pro Val His Leu Cys Leu Phe Ala Ile Ser Cys Leu 1 5 10 15 Ile Gln Leu Arg Ser Asn Cys Phe Asn Trp Gly Ser Ser Arg Ile Cys 2.0 25 30 Asp Arg Asn Val Val Lys Leu Asp Ile Phe Gln Glu Lys Leu Val 35 40 45 Asp Ile Ala Phe Ser Ser Lys Pro Pro Ser Phe Leu Val Gly Leu 55 60 Gln Ser Glu Pro Ile Val Val Ser Ile Val Leu Val Leu His Ile Pro 65 75 80 Gly Ile Phe Asp Lys Leu Leu Leu Gln Ser Leu His Pro Gln Leu Thr 85 Ile Ser Gly Ser Gly Val Ser Leu Gln His Arg Asp Leu Arg His Asn 100 105 110 Thr Ser Arg Gly Phe Ile Arg His Gly Pro Gly Leu Arg Lys Arg 120 125 Ala Glu Val Val Leu Pro Val Ala Tyr Leu Lys Ala Pro Ser Ser Leu 130 135 140

Leu Trp Glu Asp Glu Thr Leu Gly Cys Cys Lys Thr Ser

145 150 155 <210> 245 <211> 103 <212> PRT <213> Homo sapiens <400> 245 Ala Thr Leu Pro Asp Ala Leu Pro Pro Ala Thr Lys Phe Phe Leu Lys 10 Ala Phe Phe Asp Ser Ser Leu Pro Pro  ${\tt Gln}$ Ile Ser Leu Tyr Tyr Ile 20 25 Phe Ala Val Phe Pro Ser Ser Ser Gly Thr Ala Ile Ser Gly Ala Val 40 Val Gly Tyr · Val Ile Gly Met Ser Asn Ser Met Ser Asn Ser Tyr Phe 55 60 Arg Trp Gln Arg Ser Ile Tyr His Phe Pro Asn His Arg Val Pro Ser 65 70 75 80 Leu Asp Ser Ser Arg Asn Gln Ser Leu Ser Ala Phe Leu 85 90 Thr Ile Arg Asp Ser Tyr Arg 100 <210> 246 <211> 285 <212> PRT <213> Homo sapiens <400> 246 Ala Val Arg Arg Arg Gly Ala Leu Ser Leu Ser Val Gly Ala Ala Cys . 10 Gly Val Ala Trp Gln Arg Leu Arg Arg Gln Asp Ser Gly Thr 20 30 Ser Gly Phe Ser Thr Glu Glu Arg Ala Pro Ala Phe Ser Leu Glu Tyr 35 45 Val Arg Phe Leu Lys Asn Glu Lys Gly Gln Tyr Ile Ser Pro Phe 55 60 Asp Ile Pro Ile Tyr Ala Asp Phe Lys Val His Asp Met Val Val 65 70 75 80 Val Asn Ala Lys Pro Arq Trp Ser Met Glu Ile Ala Thr Asp 90 Leu Asn Pro Ile Lys Gln Asp Val Lys Lys Gly Lys Leu Arg Tyr Val 100 105 110 Ala Asn Leu Phe Pro Tyr Lys Gly Tyr Ile Trp Gly Asn Tyr Ala Ile 115 120 125 Gln Trp Thr Glu Asp Pro Gly His Asn Asp Thr Gly Cys Lys His 130 135 140

Cys 145	Gly	Asp	Asn	Asp	Pro 150	Ile	Asp	Val	Cys	Glu 155	Ile	Gly	Ser	Lys	Val 160
Cys	Ala	Arg	Gly	Glu 165	Ile	Ile	Gly	Val	Lys 170	Val	Leu	Gly	Ile	Leu 175	Ala
Met	Ile	Asp	Glu 180	Gly	Glu	Thr	Asp	Trp 185	Lys	Val	Ile	Ala	Ile 190	Asn	Val
Asp	Asp	Pro 195	Asp	Ala	Ala	Asn	Tyr 200	Asn	Asp	Ile	Asn	Asp 205	Val	Lys	Arg
Leu	Lys 210	Pro	Gly	Tyr	Leu	Glu 215	Ala	Thr	Val	Asp	Trp 220	Phe	Arg	Arg	Tyr
Lys 225	Val	Pro	Asp	Gly	Lys 230	Pro	Glu	Asn	Glu	Phe 235	Ala	Phe	Asn	Ala	Glu 240
Phe	Lys	Asp	Lys	Asp 245	Phe	Ala	Ile	Asp	Ile 250	Ile	Lys	Ser	Thr	His 255	Asp
His	Trp	Lys	Ala 260	Leu	Val	Thr	Lys	Lys 265	Thr	Asn	Gly	Lys	Arg 270	Ile	Met
Leu	Ile	Val 275	Gln	Leu	Phe	Val	Gly 280	Pro	Leu	Lys	Val	Cys 285			
210>															

<2

<211> 94

<212> PRT

<213> Homo sapiens

<400> 247

Thr 1	Lys	Gly	Leu	Arg 5	Ile	Ala	Gln	Ala	Gln 10	Leu	Cys	Pro	Gly	Ser 15	Pro
Arg	Cys	Arg	Ser 20	Gln	Ser	Ile	Ser	Arg 25	Arg	Ala	Cys	Ala	Leu 30	Cys	Leu
Arg	Pro	Ser 35	Thr	Gln	Pro	Asn	Thr 40	Thr	Tyr	Leu	Arg	Lys 45	Pro	Gly	Gly
Arg	Lys 50	Arg	Ala	Val	Gly	His 55	Lys	Ser	Pro	Ala	Glu 60	Thr	Arg	Val	Pro
Ala 65	Ser	Val	Gln	Arg	Ser 70	Gln	Pro	Pro	Arg	Ala 75	His	Arg	Lys	Ser	Cys 80
Leu	Ala	Ser	Leu	Gly 85	Leu	Cys	Lys	Asn	Asn 90	Lys	Cys	Leu	Ser		

<210> 248

<211> 113

<212> PRT

<213> Homo sapiens

<400> 248

Asp Pro Arg Pro Ser Arg Ile Gln His Ile Ser Gly Asn Pro Ala Gly 10 15

Ala Ser Glu Arg Leu Ala Ile Arg Ala Gln Leu Lys Arg Glu Tyr 25 Leu Gln Tyr Asn Asp Pro Arg Gly Leu Asn Arq Ile Glu Asn Pro Leu Leu Arg Trp Ala Ala Tyr Arg Thr Ile Asn Val Tyr Pro Asn 50 Arg Pro Thr Pro Lys Asn Ser Leu Met Gly Ala Leu Cys Gly Phe Gly 65 70 80 Ile Phe Ile Tyr Leu Tyr Ile Ile Lys Thr Glu Arg Asp Arq Lys 85 90 Glu Lys Leu Ile Gln Glu Gly Lys Leu Asp Arg Thr Phe His Leu 100 105 110

Tyr

<210> 249

<211> 98

<212> PRT

<213> Homo sapiens

<400> 249

Val Phe Arg Ser Gly Ser Glu Ile Arg Ile Asp Ile Tyr Cys Cys Gly Pro Thr Lys Gln Gly Arg Ile Phe Asp Glu Pro Ser Ala 25 Gly Ile Val Val Leu Lys Gln Val Leu Ser Phe Gln Leu Gly Ser 35 40 Gly Gln Pro Leu Ala Cys Ala Arg Arg Val Ser Gly Asp Met Leu Tyr 55 Ser Ala Gly Ser Arg Val Ser Gly Arg Val Arg Arg Leu Asp Gly Leu 65 Tyr Phe Gly Asn Asp Ile Leu Ala Asn Gln Gly Thr Ile Ala Pro 85 90 95

Arg Phe

<210> 250

<211> 158

<212> PRT

<213> Homo sapiens

<400> 250

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Val	Ala	His	Ser 260	Asp	Lys	Pro	Gly	Ser 265	Thr	Ser	Thr	Ala	Ser 270	Phe	Arg
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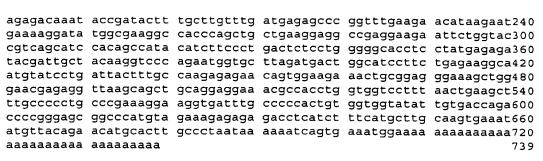
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<210> 265 <211> 1020

<212> DNA

<213> Homo sapiens

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<210> 266
<211> 1652
<212> DNA
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<213> Homo sapiens

<400> 266

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<210> 267
<211> 1409
<212> DNA
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<213> Homo sapiens

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attctcaaag gtggattaca ggaggtggca gaacagttag agctggaacg gataggacca 240 caacatcagg caggatctga ttcattgctc acaggaatgg cctttttcaa aatgagagaa 300 atgttctttg aagatcatat tgatgatgcc aaatattgtg gtcatttgta tggccttggt 360 tctggttcat cctatgtaca gaatggcaca gggaatgcat atgaagagga agccaacaag 420 cagtcatgac atgaaatagt ccttttattt ttatttcgag ctacacacat gcttgtatat 480 aggitttatc totggitgaa tocotogaac aatagacagi accittococ coccittoat 540 ggcccatttt attgtctgcc tttcagtact aagtatgacc gttcctatct cagatcttaa 600 gcaagcgtgt gtgacagaga gtggggaaag ctacatcatt gaatattttg ataaacttta 720 ccgacttgag tttggtttat ttttcccttt tcctaaatta actagcactg actgtaattt 780 atttccctgt ttcacgtctc tcccttccat tctgcaggag ttttagctat ttgagatcgt 840 ggaccatcag ttttgcactt tagagagtgt ttctgactct aaacctgttt tatcagaaaa 900 tttgtttttt cttgatctta gctggaaaaa tctgccaact ttacacagta tttacttggt 960 tttgacccac agaatatagc acgttgtgca aactgtcgat tcagcgaaac ttaaaaaaaga1020 caagaaacta ctgaggagct tagtaactgc tgtttctgta cgtagtgttt aatcttccaa1080 gcacatctag tgtctgtcag tttctaattg gcatgtgtag gctgctctgt gactgaagaall40 ttttcaaacc agctttacac ccttcaggaa aaatccctgt gattggatgg ttactatctg1200 ccaggaactg gtacccagat gtgaagcaca gttattatga tagacacttc ctgagtgcta1260 ttgtatccac accattacct ttttttttaa attggagcca tctatgagcc tgattgtggt1320 cgcaaccatt gtaaaaccca gaaagcctag ggattggcca ataattgggg aaatggtgca1380 gtgccaagga aatgggatgg caaaagaag

<210> 268 <211> 900 <212> DNA

<213> Homo sapiens

<400> 268

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<210> 269 <211> 1145 <212> DNA <213> Homo sapiens

<400> 269

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<210> 270 <211> 1836 <212> DNA

<213> Homo sapiens

<400> 270

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<210> 271 <211> 1220 <212> DNA

<213> Homo sapiens

<400> 271

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<210> 272 <211> 1303 <212> DNA

<213> Homo sapiens

<400> 272

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<210> 273 <211> 1586 <212> DNA

<213> Homo sapiens

<400> 273

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<210> 275

<211> 143

<212> PRT

<213> Homo sapiens

<400> 275

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Arg	Leu 50	Lys	Lys	Ser	Leu	Ala 55	Asn	Ala	Glu	Ser	Gln 60	Gln	Gln	Arg	Glu
Gln 65	Leu	Glu	Arg	Leu	Arg 70	Lys	Asp	Met	Gly	Ser 75	Val	Ala	Leu	Asp	Ala 80
Gly	Thr	Pro	Lys	Asp 85	Ser	Leu	Ser	Pro	Val 90	Leu	His	Pro	Ser	Asp 95	Leu
Ile	Leu	Thr	Arg 100	Pro	Thr	Leu	Glu	Ala 105	Asp	Ser	Asp	Thr	Asp 110	Asp	Ile
Asp	His	Arg 115	Val	Thr	Glu	Glu	Ser 120	His	Glu	Glu	Pro	Ala 125	Phe	Gln	Asn
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<212> PRT

<213> Homo sapiens

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Leu	Gln	Ala 35	Ala	Pro	Gly	Ala	Pro 40	Arg	Pro	Ser	Ser	Ser 45	Thr	Leu	Val
Asp	Glu 50	Leu	Glu	Ser	Ser	Phe 55	Glu	Ala	Cys	Phe	Ala 60	Ser	Leu	Val	Ser
Gln 65	Asp	Tyr	Val	Asn	Gly 70	Thr	Asp	Gln	Glu	Glu 75	Ile	Arg	Thr	Gly	Val 80
Asp	Gln	Cys	Ile	Gln 85	Lys	Phe	Leu	Asp	Ile 90	Ala	Arg	Gln	Thr	Glu 95	Cys
Phe	Phe	Leu	Gln 100	Lys	Arg	Leu	Gln	Leu 105	Ser	Val	Gln	Lys	Pro 110	Glu	Gln
Val	Ile	Lys 115	Glu	Asp	Val	Ser	Glu 120	Leu	Arg	Asn	Glu	Leu 125	Gln	Arg	Lys
Asp	Ala 130	Leu	Val	Gln	Lys	His 135	Leu	Thr	Lys	Leu	Arg 140	His	Trp	Gln	Gln
Val 145	Leu	Glu	Asp	Ile	Asn 150	Val	Gln	His	Lys	Lys 155	Pro	Ala	Asp	Ile	Pro 160
Gln	Gly	Ser	Leu	Ala 165	Tyr	Leu	Glu	Gln	Ala 170	Ser	Ala	Asn	Ile	Pro 175	Ala
Pro	Leu	Lys	Pro	Thr											

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Arg	Lys	Glu	Cys 20	Val	Ala	Asn	Leu	Thr 25	His	Gln	Pro	Thr	His 30	Arg	Pro
Thr	Ala	Ser 35	Ala	Leu	Cys	Ser	Arg 40	Trp	Leu	Gln	Arg	Cys 45	Arg	Asp	Val
Gly	Arg 50	Cys	Leu	Leu	Gln	Val 55	Gly	Gln	Gly	Ala	Leu 60	Arg	Asp	Val	Gly
Gly 65	Leu	Phe	Val	Leu	His 70	Val	Asp	Val	Leu	Gln 75	His	Leu	Leu	Pro	Met 80
Pro	Gln	Leu	Cys	Gln 85	Val	Leu	Leu	Asp							
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, Ser	Asp	Leu	Ala 20	Phe	Phe	Arg	Phe	Pro 25	Arg	Asp	Pro	Ala	Arg 30	Cys	Gln
Lys	Trp	Val 35	Glu	Asn	Cys	Arg	Arg 40	Ala	Asp	Leu	Glu	Asp 45	Lys	Thr	Pro
Asp	Gln 50	Leu	Asn	Lys	His	Tyr 55	Arg	Leu	Суѕ	Ala	Lys 60	His	Phe	Glu	Thr
Ser 65	Met	Ile	Cys	Arg	Thr 70	Ser	Pro	Tyr	Arg	Thr 75	Val	Leu	Arg	Asp	Asn 80
Ala	Ile	Pro	Thr	Ile 85	Phe	Asp	Leu	Thr	Ser 90	His	Leu	Asn	Asn	Pro 95	His
Ser	Arg	His	Arg 100	Lys	Arg	Ile	Lys	Glu 105	Leu	Ser	Glu	Asp	Glu 110	Ile	Arg
Thr	Leu	Lys 115	Gln	Lys	Lys	Ile	Asp 120	Glu	Thr	Ser	Glu	Gln 125	Glu	Gln	Lys
His	Lys 130	Glu	Thr	Asn	Asn	Ser 135	Asn	Ala	Gln	Asn	Pro 140	Ser	Glu	Glu	Glu
Gly 145	Glu	Gly	Gln	Asp	Glu 150	Asp	Ile	Leu	Pro	Leu 155	Thr	Leu	Glu	Glu	Lys 160

Glu	Asn	Lys	Glu	Tyr 165	Leu	Lys	Ser	Leu	Phe 170	Glu	Ile	Leu	Ile	Leu 175	Met .
Gly	Lys	Gln	Asn 180	Ile	Pro	Leu	Asp	Gly 185	His	Glu	Ala	Asp	Glu 190	Ile	Pro
Glu	Gly	Leu 195	Phe	Thr	Pro	Asp	Asn 200	Phe	Gln	Ala	Leu	Leu 205	Glu	Cys	Arg
. Ile	Asn 210	Ser	Gly	Glu	Glu	Val 215	Leu	Arg	Lys	Arg	Phe 220	Glu	Thr	Thr	Ala
Val 225	Asn	Thr	Leu	Phe	Cys 230	Ser	Lys	Thr	Gln	Gln 235	Arg	Gln	Met	Leu	Glu 240
Ile	Cys	Glu	Ser	Cys 245	Ile	Arg	Glu	Glu	Thr 250	Leu	Arg	Glu	Val	Arg 255	Asp
Ser	His	Phe	Phe 260	Ser	Ile	Ile	Thr	Asp 265	Asp	Val	Val	Asp	Ile 270	Ala	Gly
Glu	Glu	His 275	Leu	Pro	Val	Leu	Val 280	Arg	Phe	Val	Asp	Glu 285	Ser	His	Asn
Leu	Arg 290	Glu	Glu	Phe	Ile	Gly 295	Phe	Leu	Pro	Tyr	Glu 300	Ala	Asp	Ala	Glu
Ile 305	Leu	Ala	Val	Lys	Phe 310	His	Thr	Met	Ile	Thr 315	Glu	Lys	Trp	Gly	Leu 320
Asn	Met	Glu	Tyr	Cys 325	Arg	Gly	Gln	Ala	Tyr 330	Ile	Val	Ser	Ser	Gly 335	Phe
Ser	Ser	Lys	Met 340	Lys	Val	Val	Ala	Ser 345	Arg	Leu	Leu	Glu	Lys 350	Tyr	Pro
Gln	Ala	Ile 355	Tyr	Thr	Leu	Cys	Ser 360	Ser	Cys	Ala	Leu	Asn 365	Met	Trp	Leu
Ala	Lys 370	Ser	Val	Pro	Val	Met 375	Gly	Val	Ser	Val	Ala 380	Leu	Gly	Thr	Ile
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Thr															
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Xxx	Xxx	Glu	Glu 20	His	His	Ala	Asp	Met 25	Tyr	Arg	Ser	Asp	Leu 30	Pro	Asn
Pro	Asp	Thr 35	Leu	Ser	Ala	Glu	Leu 40	His	Cys	Trp	Arg	Ile 45	Lys	Trp	Lys

His Arg Gly Lys Asp Ile Glu Leu Pro Ser Thr Ile Tyr Glu Ala Leu 50 His Leu Pro Asp Ile Lys Phe Phe Pro Asn Val Tyr Ala Leu Leu Lys 65 70 75 80 Val Cys Ile Leu Pro Leu Val Met Lys Val Glu Asn Glu Arq Tyr Glu 85 90 95 Gly Thr Asn Lys Ala Ser Leu Lys His Ile 100 105 <210> 280 <211> 398 <212> PRT <213> Homo sapiens <400> 280 Lys Phe Trp Asp Asn Ala Gln Thr Ser Gly Lys Cys Asn Ile Glu Glu Pro Ser Glu Thr Gly Ser Lys Met Gln Lys Ser Lys Phe Lys 20 25 30 Tyr Lys Leu Val Pro Glu Glu Glu Thr Thr Ala Glu Ser Asn Thr Glu 40 45 Thr Ile Ser Glu Arg Gln Lys Glu Gly Ile Lys Leu Thr Ile Arg Ile 50 60 Ser Ser Arg Lys Lys Lys Pro Asp Ser Pro Pro Lys Val Leu Glu Pro 65 75 80 Glu Asn Gln Glu Lys Lys Thr Glu Lys Glu Glu Glu Thr Lys Asn Val 90 95 Gly Arg Thr Leu Ser Arg Arg Pro Arg Ile Ser Arg Thr Pro Ala Lys 100 105 110 Val Ala Glu Ile Gln Lys Gly Arg Asp Ala Asp Lys Lys Arg Gly Glu 115 120 125 Glu Asp Glu Val Glu Glu Glu Ser Thr Ala Gln Leu Lys Thr Asp Lys 130 135 140 Lys Glu Ile Leu Lys Lys Ser Glu Lys Asp Thr Asn Ser Lys Val Ser 145 150 155 160 Val Lys Lys Pro Lys Gly Lys Val Arg Trp Thr Gly Ser Arg Arg Thr 165 170 Gly Arg Asp Trp Lys Tyr Glu Ser Gly Ser Ser Asn Glu Gly Ser 180 185 Glu Glu Lys Ser Ser Ala Ala Ser Glu Glu Glu Glu Lys Glu Ser Glu 195 200 Glu Ala Ile Leu Ala Asp Asp Asp Glu Pro Cys Lys Lys Cys Gly 210 215 220

Pro Asn His Pro Glu Leu Ile Leu Leu Cys Asp Ser Cys Asp Ser Gly

240 230 225 235 Cys Leu Arg Pro Pro Leu Ile Ile Pro Tyr His Thr Ala Met Gly Asp 245 250 255 Phe Cys Pro Pro Cys Gln His Lys Leu Leu Glu Cys Lys 260 265 Gln Leu Gln Asp Leu Asp Val Ala Leu Lys Lys Lys Glu 280 275 285 Glu Glu Arg Gly Ala Lys Leu Val Tyr Val Ile Ser Ile Glu Arg Arg 290 295 300 Pro Pro Gln Glu Pro Phe Ser Glu Asp Gln Glu Glu Ile Ile Asp Asn 305 310 315 320 Ser Ser Ala Glu Lys Lys Lys Asp Lys Lys Lys Asn Leu Leu Arg Arg 325 330 335 Ser Thr Arg Thr Arg Lys Cys Ile Ser Tyr Arg Phe Asp Glu Phe Asp 340 345 350 Glu Ile Glu Ala Ile Ile Glu Ala Asp Gly Glu Ala Asp Asp Asp Lys 355 360 365 Ile Thr Arg Gly Gly Val Gly Arg Gly Lys Asp Ile Ser Thr Gly His 380 370 375 Gly Lys Asp Ile Ser Thr Ile Leu Asp Glu Lys Ile Ile 385 390 395 <210> 281 <211> 198 <212> PRT <213> Homo sapiens <400> 281 Ser Glu Lys Ser Gly Ser Cys Gly Gly Met Met Phe Ser Ile Leu Ser 10 Ile Phe Leu Ser Ser Pro Thr Tyr Thr Lys Arg Ser Arg Ala Arg 20 25 30 Phe Phe Lys Ala Thr Ser Lys Ser Cys Asn Cys Ser Ser Asn Phe Ser 35 40 45 Ser Ser Gln Gly Gly Gln Asn His Pro Ser Gln Cys Trp Ser Gly Leu 50 55 60 Trp Gly Gly Gln Ala Val Met Ile Ile Arg Arg Tyr Pro Ser Arg Leu 65 70 75 80 Trp Glu Ser His Arg Arg Ile Ser Ser Gly Phe Gly Arg Pro Leu His Gly Ser Ser Ser Ser Ala Arg Met Ala Ser Ser Leu 100 105 110 Ala Ala Asp Asp Phe Ser Ser Ser Ser Glu Phe Ser Pro Leu Asp 120 125 115

Pro	Ser 130	Leu	Ser	Ser	Leu	Leu 135	Glu	Tyr	Phe	His	Leu 140	Pro	Arg	Val	Arg
Glu 145	Pro	Val	His	Arg	Thr 150	Leu	Pro	Leu	Gly	Phe 155	Thr	Leu	Leu	Thr	Leu 160
Glu	Phe	Val	Ser	Phe 165	Ser	Asp	Phe	Phe	Lys 170	Ile	Ser	Phe	Leu	Ser 175	Val
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Leu	Phe	Leu 195	Ser	Ala	Phe										
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Gly	Asp	Gly	Val 20	Ala	Ser	Leu	Pro	Leu 25	Lys	Leu	Gly	Arg	Leu 30	Phe	Gly
Gly	Val	Thr 35	Arg	Gly	Phe	Asn	Met 40	Arg	Ile	Glu	Lys	Cys 45	Tyr	Phe	Cys
Ser	Gly 50	Pro	Ile	Tyr	Pro	Gly 55	His	Gly	Met	Met	Phe 60	Val	Arg	Asn	Asp
Суs 65	Lys	Val	Phe	Arg	Phe 70	Cys	Lys	Ser	Lys	Cys 75	His	Lys	Asn	Phe	Lys 80
Lys	Lys	Arg	Asn	Pro 85	Arg	Lys	Val	Arg	Trp 90	Thr	Lys	Ala	Phe	Arg 95	Lys
Ala	Ala	Gly	Lys 100	Glu	Leu	Thr	Val	Asp 105	Asn	Ser	Phe	Glu	Phe 110	Glu	Lys
Arg	Arg	Asn 115	Glu	Pro	Ile	Lys	Tyr 120	Gln	Arg	Glu	Leu	Trp 125	Asn	Lys	Thr
Ile	Asp 130	Ala	Met	Lys	Arg	Val 135	Glu	Glu	Ile	Lys	Gln 140	Lys	Arg	Gln	Ala
Lys 145	Phe	Ile	Met	Asn	Arg 150	Leu	Lys	Lys	Asn	Lys 155	Glu	Leu	Gln	Lys	Val 160
Gln	Asp	Ile	Lys	Glu 165	Val	Lys	Gln	Asn	Ile 170	His	Leu	Ile	Arg	Ala 175	Pro
Leu	Ala	Gly	Lys 180	Gly	Lys	Gln	Leu	Glu 185	Glu	Lys	Met	Val	Gln 190	Gln	Leu
Gln	Glu	Asp 195	Val	Asp	Met	Glu	Asp 200	Ala	Pro						

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<212> PRT <213> Homo sapiens

<400> 283

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Leu Glu Arg Lys

<210> 284

<211> 206 <212> PRT

<213> Homo sapiens

<400> 284

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<211> 80

<212> PRT

Lys

130

Val

Asn

Thr

145

Phe

Ser

Leu

Asp

Arg

Ala

His

Pro

Leu

180

Glu

Leu

Ser

165

Tyr Ala

Gln

Ser

150

Leu

Phe

135

Pro

Thr

Tyr

Val

Asp

Val

Glu

Leu

Gly

Pro

185

Leu

Gln

170

Arg Ala

Asn

Tyr

155

Asp

Ala Asp

Leu

140

Val

Ile

Thr

Val

Pro

Thr

Ala

Tyr

Arg

Gly

Leu

190

Glu

Ile

Arg

175

Leu

Thr

Met

Tyr

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Asp Asn Met Lys Lys Ala Leu Lys Leu Leu Lys Thr Glu Leu 195 200 <210> 289 <211> 77 <212> PRT <213> Homo sapiens <400> 289 Phe Gln Cys Gln His Gly Asn Pro Glu Leu Pro Trp Arg Lys 10 15 Ser Leu Trp Pro Ser Pro Thr Trp Pro Glu Ile Pro Gln Leu Ser Asn 20 25 30 Pro Lys Arg Thr Gln Arg Thr Leu Asp Pro Asn Cys Pro Arg Pro Ser Glu Val Gly Val Thr Pro Asn Ser Ser Gly Leu Arg His 50 60 Lys Lys Pro Arg Gln Ala Leu Tyr Ile Asn Thr Asn Pro 65 70 <210> 290 <211> 160 <212> PRT <213> Homo sapiens <400> 290 Xxx Gly Gln Leu Leu Xxx Pro Xxx Ala Xxx Gln Gly  $\mathbf{X}\mathbf{x}\mathbf{x}$ Xxx 10 15 Ala Pro Ala Ser Cys Val Xxx Xxx Gln Asp His Leu Xxx Arg Cys xxx20 25 30 Val Val Arg Trp Tyr Gln Arg Ile Thr Gly Met Pro xxxxxxAla 40 Thr Gln Arg Pro Arg Asn Phe Ser Lys Phe xxXVal Met Asp Leu His 50 55 60 Gly Phe Pro Glu xxxGly Lys Gln XxxGlu Xxx Gln Glu Xxx Glu Gly Ser Ser Gly Trp Arg Ser Lys Cys Arg Ile Ser  $\mathbf{X}\mathbf{x}\mathbf{x}$ Ser xxx85 95 90 Leu Pro Xxx Ser Thr Ile Xxx Phe Xxx Leu Lys xxxXxx Trp Xxxxxx100 105 110 Thr Trp Ile Arg xxxGln Ser Pro xxxArg Thr Tyr Arg Xxx Leu Leu 115 120 125 Gly Ser Ile Ser Glu Phe Ser Pro Gly Ser Trp Cys Leu Pro Asn Leu 130 135 140 Glu Gly Lys Pro Arg Met Thr xxxAla Lys Trp Pro Lys Phe Phe Leu 145 150 155 160

<210> 291

<211> 150

<212> PRT

<213> Homo sapiens

<400> 291

Arg 1	His	Xxx	Pro	Leu 5	Xxx	Leu	Gly	Xxx	His 10	Gly	His	Arg	Ala	His 15	Ser
Cys	Leu	Gly	Trp 20	Ser	Gln	Xxx	Ala	Leu 25	Trp	Asp	Xxx	Ala	Trp 30	Gly	Leu
Xxx	Xxx	Xxx 35	Gly	Ser	Xxx	Gln	Xxx 40	Arg	Lys	Lys	Glu	Ala 45	Xxx	Trp	Cys
Val	Xxx 50	Val	Gly	Xxx	Val	Gly 55	Xxx	Cys	Xxx	Xxx	Pro 60	Xxx	Glu	Xxx	Met
Xxx 65	Xxx	Gly	Phe	Glu	Gln 70	Asn	Xxx	Xxx	Gly	Pro 75	Xxx	Asn	Xxx	Xxx	Val 80
Ser	Xxx	Leu	Gly	Xxx 85	Xxx	Xxx	Trp	Asn	Arg 90	Xxx	Ala	Glu	Lys	Asn 95	Met
Xxx	Gly	Cys	Cys 100	Ala	Lys	Xxx	Val	Asn 105	Xxx	Xxx	Met	Asp	His 110	Xxx	Xxx
Gly	Phe	Gln 115	Xxx	Arg	Gln	Ile	Arg 120	Gly	Leu	Cys	Ser	His 125	Ala	His	Thr
Gly	Xxx 130	Asn	Cys	His	Val	Ser 135	Xxx	Ser	Gly	Ser	Asp 140	Thr	Gln	Leu	Cys
Xxx 145	Gly	Leu	Ser	Phe	Met 150										
-210-	202														

<sup>&</sup>lt;210> 292

Arg 1	Ala	Ala	Lys	Ile 5	Leu	Lys	Gly	Gly	Leu 10	Gln	Glu	Val	Ala	Glu 15	Gln
Leu	Glu	Leu	Glu 20	Arg	Ile	Gly	Pro	Gln 25	His	Gln	Ala	Gly	Ser 30	Asp	Ser
Leu	Leu	Thr 35	Gly	Met	Ala	Phe	Phe 40	Lys	Met	Arg	Glu	Met 45	Phe	Phe	Glu
Asp	His 50	Ile	Asp	Asp	Ala	Lys 55	Tyr	Cys	Gly	His	Leu 60	Tyr	Gly	Leu	Gly
Ser 65	Gly	Ser	Ser	Tyr	Val 70	Gln	Asn	Gly	Thr	Gly 75	Asn	Ala	Tyr	Glu	Glu 80
Glu	Ala	Asn	Lys	Gln 85	Ser										

<sup>&</sup>lt;210> 293

<sup>&</sup>lt;211> 86

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<sup>&</sup>lt;211> 64

Leu Ser

Val

195

Ala

Ala Gly Gly

Lys

200

Lys

Ala Glu Ala

Ala

205

Ala Ser Ala

<212> PRT <213> Homo sapiens <400> 293 Ile Lys Ala Lys Phe Asn Leu Asn Ala Phe Phe Phe Phe Phe Leu Leu Arg Ser Glu Ile Gly Thr Val Ile Leu Ser Thr Glu Arg Gln Thr Ile 20 25 Trp Ala Lys Met Lys Gly Gly Gly Lys Val Leu Ser Ile Val Arg Gly 35 40 45 Gln Pro Glu Lys Ile Pro Ile Tyr Lys His Val Cys Ser Lys Ser 55 60 <210> 294 <211> 226 <212> PRT <213> Homo sapiens <400> 294 Asp Leu Leu Phe Gly Arg Arg Lys Ala Ser Thr Ile Met Thr Pro Glu 1 10 15 Glu Leu Leu Arg Gln Asn Gln Arg Ala Leu Asn Arg Ala Arg Met Glu 20 25 30 Leu Asp Arg Glu Arg Gln Lys Leu Glu Thr Gln Glu Lys Lys Ile Ile 40 Asp Ile Ala Gln Gly Lys Lys Met Lys Gln Met Asp Ala Val 50 55 60 Ile Met Ala Lys Asp Leu Val Arg Thr Val Arg Arg Tyr Arg Lys Phe 65 70 80 Val Leu Arg Ala Met Asn Ile Gln Ala Val Ser Leu Lys Ile Gln Thr 85 90 Leu Lys Ser Asn Gln Ala Asn Ser Met Ala Met Lys Gly Val Thr 100 105 110 Ala Met Gly Thr Met Asn Arg Gln Leu Lys Gln Leu Pro Ile Gln Lys 115 120 125 Ile Met Met Glu Glu Arg Phe Gln Ala Glu Ile Met Asp Met Lys Glu 130 135 140 Glu Met Asn Asp Ala Ile Asp · Asp Pro Met Gly Glu Asp Glu Asp 145 150 155 160 Glu Glu Glu Ala Ser Asp Val Val Ser Gln Val Leu Asp Glu Gly Leu 165 175 Leu Ser Thr Asp Glu Leu Leu Ser Asn Leu Pro Ser Thr Gly Gly Ser 180 185 190

Leu Ala Asp Ala Asp Leu Glu Glu Arg Leu Lys Asn Leu Arg 210 215 220 Arg Asp 225 <210> 295 <211> 166 <212> PRT <213> Homo sapiens <400> 295 Lys Ile Leu Gly Ile His Trp Leu Ser Arg Ser Gly Arg Gly Thr 10 Arg Arg Arg Phe Leu Ser Arg Ser Ser Ser Ser Ala Ala Ser Arg Ala Glu Ala Ala Ala Ala Ser Ala Phe Phe Pro Pro Ala Ala 40 Leu Ser Glu Pro Pro Val Glu Gly Arg Phe Ser Val Asp Ser Ser 50 Leu Ser Pro Ser Ser Ser Arg Thr Trp Asp Thr Thr Ala Ser Leu Ser 65 70 75 Ser Ser Ser Ser Ser Ser Pro Met Gly Ser Ser Met Ala Ser Phe 85 90 95 Phe Ser Ser Ile Ser Met Ile Ser Ala Cys Arg Ser Asn Ser Ile 100 105 110 Ile Phe Met Trp Ile Trp Gly Asn Phe Ser Cys Leu Phe Val Met Pro 115 120 125 Met Ala Val Phe Leu Thr Pro Met Ala Cys Ala Ile Glu Leu Leu Asp 130 135 140 Leu Ser Trp Val Trp Ile Leu- Arg Asp Thr Ala Met Leu Ala Arg Ile 145 155 160 Asn Thr Asn Leu Arg Thr 165 <210> 296 <211> 233 <212> PRT <213> Homo sapiens <400> 296 Lys Pro Glu Gly Ala Arg Arg Val Gln Phe Val Met Gly Leu Phe Gly Lys Thr Gln Glu Lys Pro Pro Lys Glu Leu Val Asn Glu Trp Ser 25 30 Lys Ile Arg Lys Glu Met Val Val Arg Asp Arg Gln Ile Arg Asp Ile 35 40 Gln Arg Glu Glu Lys Val Lys Arg Ser Val Lys Asp Ala Ala Lys

50 55 60 Gly Gln Lys Val Cys Asp Ile Val Leu Ala Lys Glu Met Ile Arg 70 75 80 Ser Arg Lys Ala Val Ser Lys Leu Tyr Ala Ser Lys Ala His Met Asn 90 Ser Val Leu Met Gly Met Gln Lys Asn Leu Ala Val Arg Val Leu Ala 100 105 110 Gly Ser Leu Gln Thr Glu Lys Ser Val Met Lys Ala Met Gln Ser Leu 115 120 125 Val Lys Glu Ile Pro Ile Gln Ala Thr Met Arg Glu Leu Ser Lys Glu 130 135 140 Met Met Lys Ala Gly Ile Ile Glu Glu Met Leu Glu Asp Thr Phe Glu 145 150 155 160 Ser Met Gln Glu Glu Asp Asp Met Glu Glu Glu Ala Glu Met Glu Ile 165 170 Asp Arg Ile Leu Phe Glu Ile Thr Ala Gly Ala Leu Gly Lys Ala Pro 180 185 190 Val Thr Ser Lys Asp Ala Pro Pro Leu Glu Pro Glu Pro Gly Ala Met 195 200 205 Ala Ala Ser Glu Asp Glu Gly Glu Glu Glu Ala Leu Glu Ala Met 210 215 220 Gln Ser Arg Leu Ala Thr Leu Arg Ser 225 230

<210> 297

<211> 129

<212> PRT

<213> Homo sapiens

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Arg	Met	Arg	Gly 20	Arg	Arg	Lys	Arg	Leu 25	Trp	Arg	Pro	Cys	Ser 30	Pro	Gly
Trp	Pro	His 35	Ser	Ala	Ala	Arg	Gly 40	Cys	Leu	Pro	Arg	Trp 45	Val	Cys	Thr
His	Ser 50	Ser	Gln	Glu	Leu <sub>.</sub>	Pro 55	Phe	Tyr	Val	Ser	Leu 60	Ala	Leu	His	Leu
Cys 65	Cys	Glu	Asp	Tyr	His 70	Phe	Gly	Glu	Gly	Ser 75	Val	Cys	Leu	Phe	Ser 80
Phe	Ser	Ala	Gln	Val 85	Leu	Gly	Ser	Gln	Arg 90	Asp	Cys	Ser	Tyr	Lys 95	Ser
Gly	Ile	Asn	Lys 100	Cys	Ile	Ile	Phe	Arg 105	Ser	Ile	Asp	Arg	Tyr 110	Ile	Leu

Leu Trp Gly Glu Arg Asn Pro Ser Ala His Glu Ala Leu Leu Lys 115 120 125

Ile .

<210> 298

<2:11> 351

<212> PRT

<213> Homo sapiens

Thr 1	Trp	Cys	Thr	Thr 5	Thr	Met	Leu	Ala	Ala 10	Arg	Leu	Val	Cys	Leu 15	Arg
Thr	Leu	Pro	Ser 20	Arg	Val	Phe	His	Pro 25	Ala	Phe	Thr	Lys	Ala .30	Ser	Pro
Val	Val	Lys 35	Asn	Ser	Ile	Thr	Lys 40	Asn	Gln	Trp	Leu	Leu 45	Thr	Pro	Ser
Arg	Glu 50	Tyr	Ala	Thr	Lys	Thr 55	Arg	Ile	Gly	Ile	Arg 60	Arg	Gly	Arg	Thr
Gly 65	Gln	Glu	Leu	Lys	Glu 70	Ala	Ala	Leu	Glu	Pro 75	Ser	Met	Glu	Lys	Ile 80
Phe	Lys	Ile	Asp	Gln 85	Met	Gly	Arg	Trp	Phe 90	Val	Ala	Gly	Gly	Ala 95	Ala
Val	Gly	Leu	Gly 100	Ala	Leu	Cys	Tyr	Tyr 105	Gly	Leu	Gly	Leu	Ser 110	Asn	Glu
Ile	Gly	Ala 115	Ile	Glu	Lys	Ala	Val 120	Ile	Trp	Pro	Gln	Tyr 125	Val	Lys	Asp
Arg	Ile 130	His	Ser	Thr	Tyr	Met 135	Tyr	Leu	Ala	Gly	Ser 140	Ile	Gly	Leu	Thr
Ala 145	Leu	Ser	Ala	Ile	Ala 150	Ile	Ser	Arg	Thr	Pro 155	Val	Leu	Met	Asn	Phe 160
Met	Met	Arg	Gly	Ser 165	Trp	Val	Thr	Ile .	Gly 170	Val	Thr	Phe	Ala	Ala 175	Met
Val	Gly	Ala	Gly 180	Met	Leu	Val	Arg	Ser 185	Ile	Pro	Tyr	Asp	Gln 190	Ser	Pro
Gly	Pro	Lys 195	His	Leu	Ala	Trp	Leu 200	Leu	His	Ser	Gly	Val 205	Met	Gly	Ala
Val	Val 210	Ala	Pro	Leu	Thr	Ile 215	Leu	Gly	Gly	Pro	Leu 220	Leu	Ile	Arg	Ala
Ala 225	Trp	Tyr	Thr	Ala	Gly 230	Ile	Val	Gly	Gly	Leu 235	Ser	Thr	Val	Ala	Met 240
Cys	Ala	Pro	Ser	Glu 245	Lys	Phe	Leu	Asn	Met 250	Gly	Ala	Pro	Leu	Gly 255	Val
Gly	Leu	Gly	Leu 260	Val	Phe	Val	Ser	Ser 265	Leu	Gly	Ser	Met	Phe 270	Leu	Pro

Pro	Thr	Thr 275	Val	Ala	Gly	Ala	Thr 280	Leu	Tyr	Ser	Val	Ala 285	Met	Tyr	Gly
Gly	Leu 290	Val	Leu	Phe	Ser	Met 295	Phe	Leu	Leu	Tyr	Asp 300	Thr	Gln	Lys	Val
Ile 305	Lys	Arg	Ala	Glu	Val 310	Ser	Pro	Met	Tyr	Gly 315	Val	Gln	Lys	Tyr	Asp 320
Pro	Ile	Asn	Ser	Met 325	Leu	Ser	Ile	Tyr	Met 330	Asp	Thr	Leu	Asn	Ile 335	Phe
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Glu	Asp	Thr	Lys 20	Thr	Arg	Pro	Arg	Pro 25	Thr	Pro	Arg	Gly	Ala 30	Pro	Met
Phe	Arg	Asn 35	Phe	Ser	Leu	Gly	Ala 40	His	Met	Ala	Thr	Val 45	Glu	Arg	Pro
Pro	Thr 50	Met	Pro	Ala	Val	Tyr 55	His	Ala	Ala	Leu	Met 60	Arg	Arg	Gly	Pro
Pro 65	Asn	Ile	Val	Arg	Gly 70	Ala	Thr	Thr	Ala	Pro 75	Ile	Thr	Pro	Glu	Суs 80
Ser	Asn	Gln	Ala	Arg 85	Cys	Phe	Gly	Pro	Gly 90	Leu	Trp	Ser	Tyr	Gly 95	Ile
Asp	Arg	Thr	Ser 100	Ile	Pro	Ala	Pro	Thr 105	Met	Ala	Ala	Lys	Val 110	Thr	Pro
Ile	Val	Thr 115	Gln	Glu	Pro	Leu	Ile 120	Met	Lys	Phe	Met	Arg 125	Thr	Gly	Val
Leu	Leu 130	Ile	Ala	Met	Ala	Asp 135	Lys	Ala	Val	Lys	Pro 140	Ile	Leu	Pro	Ala
Lys 145	Tyr	Ile													

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<211> 188

<212> PRT

<213> Homo sapiens

<400> 300

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Glu	Ile	Pro 35	Val	Leu	Lys	Thr	Asn 40	Ala	Gly	Pro	Arg	Asp 45	Arg	Glu	Leu
Trp	Val 50	Gln	Arg	Leu	Lys	Glu 55	Glu	Tyr	Gln	Ser	Leu 60	Ile	Arg	Tyr	Val
Glu 65	Asn	Asn	Lys	Asn	Ala 70	Asp	Asn	Asp	Trp	Phe 75	Arg	Leu	Glu	Ser	Asn 80
Lys	Glu	Gly	Thr	Arg 85	Trp	Phe	Gly	Lys	Суs 90	Trp	Tyr	Ile	His	Asp 95	Leu
Leu	Lys	Tyr	Glu 100	Phe	Asp	Ile	Glu	Phe 105	Asp	Ile	Pro	Ile	Thr 110	Tyr	Pro
Thr	Thr	Ala 115	Pro	Glu	Ile	Ala	Val 120	Pro	Glu	Leu	Asp	Gly 125	Lys	Thr	Ala
Lys	Met 130	Tyr	Arg	Gly	Gly	Lys 135	Ile	Cys	Leu	Thr	Asp 140	His	Phe	Lys	Pro
Leu 145	Trp	Ala	Arg	Asn	Val 150	Pro	Lys	Phe	Gly	Leu 155	Ala	His	Leu	Met	Ala 160
Leu	Gly	Leu	Gly	Pro 165	Trp	Leu	Ala	Val	Glu 170	Ile	Pro	Asp	Leu	Ile 175	Gln
Lys	Gly	Val	Ile 180	Gln	His	Lys	Glu	Lys 185	Cys	Asn	Gln				
270	201														

<210> 301 <211> 172 <212> PRT

<213> Homo sapiens

1	гуѕ	Pne	GIÀ	H1S	iie	Pro	GIÀ	Pro	10	Arg	Pne	Glu	Met	11e 15	Arg
Gln	Ala	Tyr	Phe 20	Ala	Thr	Pro	Val	His 25	Leu	Cys	Cys	Leu	Ser 30	Ile	Gln
Leu	Arg	Asn 35	Cys	Asn	Phe	Trp	Gly 40	Ser	Ser	Arg	Ile	Cys 45	Asp	Arg	Asn
Val	Lys 50	Leu	Asp	Val	Lys	Leu 55	Ile	Phe	Gln	Glu	Val 60	Met	Asp	Ile	Pro
Ala 65	Phe	Ser	Lys	Pro	-Pro 70	Ser	Ser	Phe	Leu	Val 75	Gly	Leu	Gln	Ser	Glu 80
Pro	Ile	Val	Val	Ser 85	Ile	Leu	Val	Val	Leu 90	His	Ile	Pro	Asp	Lys 95	Gly
Leu	Ile	Phe	Leu 100	Leu	Gln	Ser	Leu	His 105	Pro	Gln	Leu	Thr	Ile 110	Ser	Gly
Ser	Gly	Val 115			Gln		Arg 120	Asp	Leu	Arg	His	Asn 125	Thr	Ser	Arg

Gly	Phe 130	Ile	Arg	His	Leu	Gly 135	Pro	Gly	Arg	Lys	Arg 140	Asn	Ala	Glu	Val
Val 145	Leu	Pro	Val	Ala	Туг 150	Leu	Lys	Ala	Pro	Ser 155	Ser	Leu	Leu	Trp	Glu 160
Asp	Glu	Thr	Leu	Gly 165	Cys	Cys	Lys	Thr	Ser 170	Phe	Glu				
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Gly	Leu	Val	Ala 20	Leu	Trp	Gln	Arg	Arg 25	Arg	Gln	Asp	Ser	Gly 30	Thr	Met
Ser	Gly	Phe 35	Ser	Thr	Glu	Glu	Arg 40	Ala	Ala	Pro	Phe	Ser 45	Leu	Glu	Tyr
Arg	Val 50	Phe	Leu	Lys	Asn	Glu 55	Lys	Gly	Gln	Tyr	Ile 60	Ser	Pro	Phe	His
Asp 65	Ile	Pro	Ile	Tyr	Ala 70	Asp	Lys	Asp	Val	Phe 75	His	Met	Val	Val	Glu 80
Val	Pro	Arg	Trp	Ser 85	Asn	Ala	Lys	Met	Glu 90	Ile	Ala	Thr	Lys	Asp 95	Pro
Leu	Asn	Pro	Ile 100	Lys	Gln	Asp	Val	Lys 105	Lys	Gly	Lys	Leu	Arg 110	Tyr	Val
Ala	Asn	Leu 115	Phe	Pro	Tyr	Lys	Gly 120	Tyr	Ile	Trp	Asn	Tyr 125	Gly	Ala	Ile
Pro	Gln 130	Thr	-	Glu	Asp	Pro 135	Gly	His	Asn	Asp	Lys 140	His	Thr	Gly	Суз
Cys 145	Gly	Asp	Asn	Asp	Pro 150	Ile	Asp	Val	Cys	Glu 155	Ile	Gly	Ser	Lys	Val 160
Cys	Ala	Arg	Gly	Glu 165	Ile	Ile	Gly	Val	Lys 170	Val	Leu	Gly	Ile	Leu 175	Ala
Met	Ile	Asp	Glu 180	Gly	Glu	Thr	Asp	Trp 185	Lys	Val	Ile	Ala	Ile 190	Asn	Val
Asp	Asp	Pro 195	Asp	Ala	Ala	Asn	Tyr 200	Asn	Asp	Ile	Asn	Asp 205	Val	Lys	Arg
Leu	Lys 210	Pro	Gly	Tyr	Leu	Glu 215	Ala	Thr	Val	Asp	Trp 220	Phe	Arg	Arg	Tyr
Lys 225	Val	Pro	Asp	Gly	Lys 230	Pro	Glu	Asn	Glu	Phe 235	Ala	Phe	Asn	Ala	Glu 240
Phe	Lys	Asp	Lys	Asp 245	Phe	Ala	Ile	Asp	Ile 250	Ile	Lys	Ser	Thr	His 255	Asp

Thr

65

Ile

Ser

Tyr

Asn

His	Trp	Lys	Ala 260	Leu	Val	Thr	Lys	Lys 265	Thr	Asn	Gly	Lys	Gly 270	Ile	Ser
Cys	Met	Asn 275	Thr	Thr	Leu	Ser	Glu 280	Ser	Pro	Phe	Lys	Cys 285	Asp	Pro	Asp
Ala	Ala 290	_	Ala	Ile	Val	Asp 295	Ala	Leu	Pro	Pro	Pro 300	Cys	Glu	Ser	Ala
Cys 305	Thr	Val	Pro	Thr	Asp 310	Val	Asp	Lys	Trp	Phe 315	His	His	Gln	Lys	Asn 320
<210><211><212><213>	85 PRT	sapie	ens						•						
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Phe	Asn	Tyr	His 20	Val	Lys	His	Ile	Leu 25	Ile	Cys	Ile	Asn	Trp 30	Asn	Ile
Met	Lys	Trp 35	Arg	Tyr	Ile	Leu	Ser 40	Phe	Leu	Ile	Phe	Glu 45	Glu	Asp	Ser
Val	Leu 50	Gln	Gly	Glu	Gly	Arg 55	Gly	Ala	Leu	Leu	Gly 60	Ala	Glu	Ala	Ala
His 65	Ser	Ala	Gly	Val	Leu 70	Pro	Pro	Pro	Leu	Pro 75	Gln	Ser	His	Gln	Pro 80
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<210><211><212><213>	247 PRT	sapie	ns												
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Arg	Gly	Gly	Arg 20	Gly	Arg	Gly	Met	Gly 25	Arg	Gly	Asp	Gly	Phe 30	Asp	Ser
Arg	Gly	Lys 35	Arg	Glu	Phe	Asp	Arg 40	His	Ser	Gly	Ser	Asp 45	Arg	Ser	Gly
Leu	Lys 50	His	Glu	Asp	Lys	Arg 55	Gly	Gly	Ser	Gly	Ser 60	His	Asn	Trp	Gly

Lys 75

Ser Asn

Ile

Gln

Thr

Gln

Glu

Glu 95 80

Leu 70

Ser Asp

Thr

Glu

Leu

Ser

Asp

Pro

Gln 90

 $\operatorname{Glu}$ 

Tyr 85

Thr	Pro	Glu	Gly 100	Glu	Glu	His	His	Pro 105	Val	Ala	Asp	Thr	Glu 110	Asn	Lys
Glu	Asn	Glu 115	Val	Glu	Glu	Val	Lys 120	Glu	Glu	Gly	Pro	Lys 125	Glu	Met	Thr
Leu	Asp 130	Glu	Trp	Lys	Ala	Ile 135	Gln	Asn	Lys	Asp	Arg 140	Ala	Lys	Val	Glu
Phe 145	Asn	Ile	Arg	Lys	Pro 150	Asn	Glu	Gly	Ala	Asp 155	Gly	Gln	Trp	Lys	Lys 160
Gly	Phe	Val	Leu	His 165	Lys	Ser	Lys	Ser	Glu 170	Glu	Ala	His	Ala	Glu 175	Asp
Ser	Val	Met	Asp 180	His	His	Phe	Arg	Lys 185	Pro	Ala	Asn	Asp	Ile 190	Thr	Ser
Gln	Leu	Glu 195	Ile	Asn	Phe	Gly	Asp 200	Leu	Gly	Arg	Pro	Gly 205	Arg	Gly	Gly
Arg	Gly 210	Gly	Arg	Gly	Gly	Arg 215	Gly	Arg	Gly	Gly	Arg 220	Pro	Asn	Arg	Gly
Ser 225	Arg	Thr	Asp	Lys	Ser 230	Ser	Ala	Ser	Ala	Pro 235	Asp	Val	Asp	Asp	Pro 240
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<211> 78

<212> PRT

<213> Homo sapiens

245

<400> 305

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<210> 306

<211> 293

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1 10 15

Arg Arg Arg Trp Ala Gly Gly Leu Leu Gln Arg Ala Ala Pro Cys Ser

20

25 30

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Leu	Leu	Pro 35	Arg	Leu	Arg	Thr	Trp 40	Thr	Ser	Ser	Ser	Asn 45	Arg	Ser	Arg
Glu	Asp 50	Ser	Trp	Leu	Lys	Ser 55	Leu	Phe	Val	Arg	Lys 60	Val	Asp	Pro	Arg
Lys 65	Asp	Ala	His	Ser	Asn 70	Leu	Leu	Ala	Lys	Lys 75	Glu	Thr	Ser	Asn	Leu 80
Tyr	Lys	Leu	Gln	Phe 85	His	Asn	Val	Lys	Pro 90	Glu	Cys	Leu	Glu	Ala 95	Tyr
Asn	Lys	Ile	Cys 100	Gln	Glu	Val	Leu	Pro 105	Lys	Ile	His	Glu	Asp 110	Lys	His
Tyr	Pro	Cys 115	Thr	Leu	Val	Gly	Thr 120	Trp	Asn	Thr	Trp	Tyr 125	Gly	Glu	Gln
Asp	Gln 130	Ala	Val	His	Leu	Trp 135	Arg	Tyr	Glu	Gly	Gly 140	Tyr	Pro	Ala	Leu
Thr 145	Glu	Val	Met	Asn	Lys 150	Leu	Arg	Glu	Asn	Lys 155	Glu	Phe	Leu	Glu	Phe 160
Arg	Lys	Ala	Arg	Ser 165	Asp	Met	Leu	Leu	Ser 170	Arg	Lys	Asn	Gln	Leu 175	Leu
Leu	Glu	Phe	Ser 180	Phe	Trp	Asn	Glu	Pro 185	Val	Pro	Arg	Ser	Gly 190	Pro	Asn
Ile	Tyr	Glu 195	Leu	Arg	Ser	Tyr	Gln 200	Leu	Arg	Pro	Gly	Thr 205	Met	Ile	Glu
Trp	Gly 210	Asn	Tyr	Trp	Ala	Arg 215	Ala	Ile	Arg	Phe	Arg 220	Gln	Asp	Gly	Asn
Glu 225	Ala	Val	Gly	Gly	Phe 230	Phe	Ser	Gln	Ile	Gly 235	Gln	Leu	Tyr	Met	Val 240
His	His	Leu	Trp	Ala 245	Tyr	Arg	Asp	Leu	Gln 250	Thr	Arg	Glu	Asp	Ile 255	Arg
Asn	Ala	Ala	Trp 260	His	Lys	His	Gly	Trp 265	Glu	Glu	Leu	Val	Tyr 270	Tyr	Thr
Val	Pro	Leu 275	Ile	Gln	Glu	Met	Glu 280	Ser	Arg	Ile	Met	Ile 285	Pro	Leu	Lys
Thr	Ser	Pro	Leu	Gln											

Thr Ser Pro Leu Gln 290

<210> 307

<211> 208

<212> PRT

<213> Homo sapiens

<400> 307

Ala His Arg Asn Ser Thr Ala Leu Leu Glu Gly Arg Gly Leu Gln Trp 1 5 10 15



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Tyr	Gln	Phe	Leu	Pro	Ala	Met	Phe	Val	Pro	Cys	Cys	Ile	Pro	Tyr	Val

Asp	птъ	Asp	20	GIY	PHE	urs	PHE	25	ASII	цуѕ	115	ASII	30	val	iie
Tyr	Gln	Phe 35	Leu	Pro	Ala	Met	Phe 40	Val	Pro	Cys	Cys	Ile 45	Pro	Tyr	Val
Phe	Pro 50	Gly	Leu	Lys	Ile	Pro 55	Val	Ser	Pro	Lys	Met 60	Val	His	His	Val
Gln 65	Leu	Pro	Asn	Leu	Arg 70	Glu	Glu	Ser	Ser	Asp 75	Gly	Phe	Val	Thr	Ile 80
Leu	Ser	Glu	Ala	Asp 85	Cys	Thr	Ser	Pro	Val 90	Ile	Ala	Pro	Phe	Asn 95	His
Gly	Ser	Trp	Ser 100	Glu	Leu	Val	Arg	Pro 105	Glu	Phe	Ile	Tyr	Ile 110	Arg	Ser
Gly	Ser	Trp 115	His	Arg	Leu	Ile	Pro 120	Glu	Thr	Glu	Leu	Gln 125	Gln	Glu	Leu
Ile	Leu 130	Pro	Gly	Glu	Lys	His 135	Val	Thr	Ser	Cys	Leu 140	Thr	Lys	Phe	Gln
Lys 145	Phe	Leu	Ile	Phe	Ser 150	Glu	Phe	Ile	His	Asp 155	Phe	Cys	Glu	Gly	Trp 160
Ile	Ala	Ser	Phe	Ile 165	Pro	Pro	Glu	Val	Asp 170	Ser	Leu	Val	Leu	Leu 175	Ala
Ile	Pro	Arg	Val 180	Pro	Ser	Pro	Hís	Gln 185	Ser	Thr	Arg	Val	Val 190	Phe	Ile
Phe	Val	Asn	Leu	Trp	Gln	His	Leu	Leu	Thr	Asn	Phe	Val	Val	Cys	Phe